

SEQUENCE LISTING

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IP20 Rec'd PCT/PTO 21 APR 2006

<110> Bayer, AG

<120> METHODS AND COMPOSITIONS FOR THE PREDICTION, DIAGNOSIS, PROGNOSIS,
PREVENTION AND TREATMENT OF MALIGNANT NEOPLASIA

<130> BHC031051

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<170> PatentIn version 3.1

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<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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<210> 25

<211> 1871

<212> DNA

<213> Homo sapiens

<400> 25

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<210> 26

<211> 1447

<212> DNA

<213> Homo sapiens

<400> 26

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caagtaccag	acggagcagc	ccctgcggca	gctgggtggg	tccgacatca	acagcctgcg	360
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<210> 27

<211> 261

<212> PRT

<213> Homo sapiens

<400> 27

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Glu Thr Cys Lys Met Thr Leu Asn Met Lys Asn Tyr Lys Gly Tyr Glu
          35          40          45
Lys Lys Pro Tyr Cys Asn Ala His Tyr Pro Lys Gln Ser Phe Thr Met
          50          55          60
Val Ala Asp Thr Pro Glu Asn Leu Arg Leu Lys Gln Gln Ser Glu Leu
          65          70          75          80
Gln Ser Gln Val Arg Tyr Lys Glu Glu Phe Glu Lys Asn Lys Gly Lys
          85          90          95
Gly Phe Ser Val Val Ala Asp Thr Pro Glu Leu Gln Arg Ile Lys Lys
          100          105          110
Thr Gln Asp Gln Ile Ser Asn Ile Lys Tyr His Glu Glu Phe Glu Lys
          115          120          125
Ser Arg Met Gly Pro Ser Gly Gly Glu Gly Met Glu Pro Glu Arg Arg
          130          135          140
Asp Ser Gln Asp Gly Ser Ser Tyr Arg Arg Pro Leu Glu Gln Gln Gln
          145          150          155          160
Pro His His Ile Pro Thr Ser Ala Pro Val Tyr Gln Gln Pro Gln Gln
          165          170          175
Gln Pro Val Ala Gln Ser Tyr Gly Gly Tyr Lys Glu Pro Ala Ala Pro
          180          185          190
Val Ser Ile Gln Arg Ser Ala Pro Gly Gly Gly Gly Lys Arg Tyr Arg
          195          200          205
Ala Val Tyr Asp Tyr Ser Ala Ala Asp Glu Asp Glu Val Ser Phe Gln
          210          215          220
Asp Gly Asp Thr Ile Val Asn Val Gln Gln Ile Asp Asp Gly Trp Met
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Tyr Gly Thr Val Glu Arg Thr Gly Asp Thr Gly Met Leu Pro Ala Asn
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<210> 28

<211> 478

<212> PRT

<213> Homo sapiens

<400> 28

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Lys Arg Lys Gly Arg Phe Lys Arg Ser Asp Gly Ser Thr Ser Ser Asp
      35      40      45
Thr Thr Ser Asn Ser Phe Val Arg Gln Gly Ser Ala Glu Ser Tyr Thr
      50      55      60
Ser Arg Pro Ser Asp Ser Asp Val Ser Leu Glu Glu Asp Arg Glu Ala
65      70      75      80
Leu Arg Lys Glu Ala Glu Arg Gln Ala Leu Ala Gln Leu Glu Lys Ala
      85      90      95
Lys Thr Lys Pro Val Ala Phe Ala Val Arg Thr Asn Val Gly Tyr Asn
      100      105      110
Pro Ser Pro Gly Asp Glu Val Pro Val Gln Gly Val Ala Ile Thr Phe
      115      120      125
Glu Pro Lys Asp Phe Leu His Ile Lys Glu Lys Tyr Asn Asn Asp Trp
130      135      140
Trp Ile Gly Arg Leu Val Lys Glu Gly Cys Glu Val Gly Phe Ile Pro
145      150      155      160
Ser Pro Val Lys Leu Asp Ser Leu Arg Leu Leu Gln Glu Gln Lys Leu
      165      170      175
Arg Gln Asn Arg Leu Gly Ser Ser Lys Ser Gly Asp Asn Ser Ser Ser
      180      185      190
Ser Leu Gly Asp Val Val Thr Gly Thr Arg Arg Pro Thr Pro Pro Ala
195      200      205
Ser Ala Lys Gln Lys Gln Lys Ser Thr Glu His Val Pro Pro Tyr Asp
210      215      220
Val Val Pro Ser Met Arg Pro Ile Ile Leu Val Gly Pro Ser Leu Lys
225      230      235      240
Gly Tyr Glu Val Thr Asp Met Met Gln Lys Ala Leu Phe Asp Phe Leu
      245      250      255
Lys His Arg Phe Asp Gly Arg Ile Ser Ile Thr Arg Val Thr Ala Asp
260      265      270
Ile Ser Leu Ala Lys Arg Ser Val Leu Asn Asn Pro Ser Lys His Ile
275      280      285
Ile Ile Glu Arg Ser Asn Thr Arg Ser Ser Leu Ala Glu Val Gln Ser
290      295      300
Glu Ile Glu Arg Ile Phe Glu Leu Ala Arg Thr Leu Gln Leu Val Ala
305      310      315      320
Leu Asp Ala Asp Thr Ile Asn His Pro Ala Gln Leu Ser Lys Thr Ser
      325      330      335
Leu Ala Pro Ile Ile Val Tyr Ile Lys Ile Thr Ser Pro Lys Val Leu
      340      345      350
Gln Arg Leu Ile Lys Ser Arg Gly Lys Ser Gln Ser Lys His Leu Asn
355      360      365
Val Gln Ile Ala Ala Ser Glu Lys Leu Ala Gln Cys Pro Pro Glu Met
370      375      380
Phe Asp Ile Ile Leu Asp Glu Asn Gln Leu Glu Asp Ala Cys Glu His
385      390      395      400
Leu Ala Glu Tyr Leu Glu Ala Tyr Trp Lys Ala Thr His Pro Pro Ser
      405      410      415
Ser Thr Pro Pro Asn Pro Leu Leu Asn Arg Thr Met Ala Thr Ala Ala
420      425      430
Leu Arg Arg Ser Pro Ala Pro Val Ser Asn Leu Gln Val Gln Val Leu
435      440      445
Thr Ser Leu Arg Arg Asn Leu Gly Phe Trp Gly Gly Leu Glu Ser Ser
450      455      460

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Gln Arg Gly Ser Val Val Pro Gln Glu Gln Glu His Ala Met
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<210> 29

<211> 196

<212> PRT

<213> Homo sapiens

<400> 29

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 Ala Asn Ala Asn Ser Arg Gln Gln Ile Arg Lys Leu Ile Lys Asp Gly
 35 40 45
 Leu Ile Ile Arg Lys Pro Val Thr Val His Ser Arg Ala Arg Cys Arg
 50 55 60
 Lys Asn Thr Leu Ala Arg Arg Lys Gly Arg His Met Gly Ile Gly Lys
 65 70 75 80
 Arg Lys Gly Thr Ala Asn Ala Arg Met Pro Glu Lys Val Thr Trp Met
 85 90 95
 Arg Arg Met Arg Ile Leu Arg Arg Leu Leu Arg Arg Tyr Arg Glu Ser
 100 105 110
 Lys Lys Ile Asp Arg His Met Tyr His Ser Leu Tyr Leu Lys Val Lys
 115 120 125
 Gly Asn Val Phe Lys Asn Lys Arg Ile Leu Met Glu His Ile His Lys
 130 135 140
 Leu Lys Ala Asp Lys Ala Arg Lys Lys Leu Leu Ala Asp Gln Ala Glu
 145 150 155 160
 Ala Arg Arg Ser Lys Thr Lys Glu Ala Arg Lys Arg Arg Glu Glu Arg
 165 170 175
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 Glu Thr Lys Lys
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<210> 30

<211> 1566

<212> PRT

<213> Homo sapiens

<400> 30

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 Val Val Met Ser Ser Gly Gly His Gln His Leu Val Ser Cys Leu Glu
 35 40 45
 Thr Leu Gln Lys Ala Leu Lys Val Thr Ser Leu Pro Ala Met Thr Asp
 50 55 60
 Arg Leu Glu Ser Ile Ala Gly Gln Asn Gly Leu Gly Ser His Leu Ser
 65 70 75 80
 Ala Ser Gly Thr Glu Cys Tyr Ile Thr Ser Asp Met Phe Tyr Val Glu
 85 90 95
 Val Gln Leu Asp Pro Ala Gly Gln Leu Cys Asp Val Lys Val Ala His
 100 105 110
 His Gly Glu Asn Pro Val Ser Cys Pro Glu Leu Val Gln Gln Leu Arg
 115 120 125

Glu Lys Asn Ser Asp Glu Phe Ser Lys His Leu Lys Gly Leu Val Asn
 130 135 140
 Leu Tyr Asn Leu Pro Gly Asp Asn Lys Leu Lys Thr Lys Met Tyr Leu
 145 150 155 160
 Ala Leu Gln Ser Leu Glu Gln Asp Leu Ser Lys Met Ala Ile Met Tyr
 165 170 175
 Trp Lys Ala Thr Asn Ala Gly Pro Leu Asp Lys Ile Leu His Gly Ser
 180 185 190
 Val Gly Tyr Leu Thr Pro Arg Ser Gly Gly His Leu Met Asn Leu Lys
 195 200 205
 Tyr Tyr Val Ser Pro Ser Asp Leu Leu Asp Asp Lys Thr Ala Ser Pro
 210 215 220
 Ile Ile Leu His Glu Asn Asn Val Ser Arg Ser Leu Gly Met Asn Ala
 225 230 235 240
 Ser Val Thr Ile Glu Gly Thr Ser Ala Val Tyr Lys Leu Pro Ile Ala
 245 250 255
 Pro Leu Ile Met Gly Ser His Pro Val Asp Asn Lys Trp Thr Pro Ser
 260 265 270
 Phe Ser Ser Ile Thr Ser Ala Asn Ser Val Asp Leu Pro Ala Cys Phe
 275 280 285
 Phe Leu Lys Phe Pro Gln Pro Ile Pro Val Ser Arg Ala Phe Val Gln
 290 295 300
 Lys Leu Gln Asn Cys Thr Gly Ile Pro Leu Phe Glu Thr Gln Pro Thr
 305 310 315 320
 Tyr Ala Pro Leu Tyr Glu Leu Ile Thr Gln Phe Glu Leu Ser Lys Asp
 325 330 335
 Pro Asp Pro Ile Pro Leu Asn His Asn Met Arg Phe Tyr Ala Ala Leu
 340 345 350
 Pro Gly Gln Gln His Cys Tyr Phe Leu Asn Lys Asp Ala Pro Leu Pro
 355 360 365
 Asp Gly Arg Ser Leu Gln Gly Thr Leu Val Ser Lys Ile Thr Phe Gln
 370 375 380
 His Pro Gly Arg Val Pro Leu Ile Leu Asn Leu Ile Arg His Gln Val
 385 390 395 400
 Ala Tyr Asn Thr Leu Ile Gly Ser Cys Val Lys Arg Thr Ile Leu Lys
 405 410 415
 Glu Asp Ser Pro Gly Leu Leu Gln Phe Glu Val Cys Pro Leu Ser Glu
 420 425 430
 Ser Arg Phe Ser Val Ser Phe Gln His Pro Val Asn Asp Ser Leu Val
 435 440 445
 Cys Val Val Met Asp Val Gln Gly Leu Thr His Val Ser Cys Lys Leu
 450 455 460
 Tyr Lys Gly Leu Ser Asp Ala Leu Ile Cys Thr Asp Asp Phe Ile Ala
 465 470 475 480
 Lys Val Val Gln Arg Cys Met Ser Ile Pro Val Thr Met Arg Ala Ile
 485 490 495
 Arg Arg Lys Ala Glu Thr Ile Gln Ala Asp Thr Pro Ala Leu Ser Leu
 500 505 510
 Ile Ala Glu Thr Val Glu Asp Met Val Lys Lys Asn Leu Pro Pro Ala
 515 520 525
 Ser Ser Pro Gly Tyr Gly Met Thr Thr Gly Asn Asn Pro Met Ser Gly
 530 535 540
 Thr Thr Thr Ser Thr Asn Thr Phe Pro Gly Gly Pro Ile Ala Thr Leu
 545 550 555 560
 Phe Asn Met Ser Met Ser Ile Lys Asp Arg His Glu Ser Val Gly His
 565 570 575
 Gly Glu Asp Phe Ser Lys Val Ser Gln Asn Pro Ile Leu Thr Ser Leu
 580 585 590
 Leu Gln Ile Thr Gly Asn Gly Gly Ser Thr Ile Gly Ser Ser Pro Thr
 595 600 605
 Pro Pro His His Thr Pro Pro Pro Val Ser Ser Met Ala Gly Asn Thr
 610 615 620
 Lys Asn His Pro Met Leu Met Asn Leu Leu Lys Asp Asn Pro Ala Gln
 625 630 635 640
 Asp Phe Ser Thr Leu Tyr Gly Ser Ser Pro Leu Glu Arg Gln Asn Ser
 645 650 655

Ser Ser Gly Ser Pro Arg Met Glu Ile Cys Ser Gly Ser Asn Lys Thr
 660 665 670
 Lys Lys Lys Lys Ser Ser Arg Leu Pro Pro Glu Lys Pro Lys His Gln
 675 680 685
 Thr Glu Asp Asp Phe Gln Arg Glu Leu Phe Ser Met Asp Val Asp Ser
 690 695 700
 Gln Asn Pro Ile Phe Asp Val Asn Met Thr Ala Asp Thr Leu Asp Thr
 705 710 715 720
 Pro His Ile Thr Pro Ala Pro Ser Gln Cys Ser Thr Pro Pro Thr Thr
 725 730 735
 Tyr Pro Gln Pro Val Pro His Pro Gln Pro Ser Ile Gln Arg Met Val
 740 745 750
 Arg Leu Ser Ser Ser Asp Ser Ile Gly Pro Asp Val Thr Asp Ile Leu
 755 760 765
 Ser Asp Ile Ala Glu Glu Ala Ser Lys Leu Pro Ser Thr Ser Asp Asp
 770 775 780
 Cys Pro Ala Ile Gly Thr Pro Leu Arg Asp Ser Ser Ser Ser Gly His
 785 790 795 800
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 805 810 815
 Glu Asn Pro Tyr Thr Asp Pro Ala Asp Leu Ile Ala Asp Ala Ala Gly
 820 825 830
 Ser Pro Ser Ser Asp Ser Pro Thr Asn His Phe Phe His Asp Gly Val
 835 840 845
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 850 855 860
 Glu Glu Tyr Phe Asp Glu Ser Ser Gln Ser Gly Asp Asn Asp Asp Phe
 865 870 875 880
 Lys Gly Phe Ala Ser Gln Ala Leu Asn Thr Leu Gly Val Pro Met Leu
 885 890 895
 Gly Gly Asp Asn Gly Glu Thr Lys Phe Lys Gly Asn Asn Gln Ala Asp
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 Thr Val Asp Phe Ser Ile Ile Ser Val Ala Gly Lys Ala Leu Ala Pro
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 Ala Asp Leu Met Glu His His Ser Gly Ser Gln Gly Pro Leu Leu Thr
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 Thr Gly Asp Leu Gly Lys Glu Lys Thr Gln Lys Arg Val Lys Glu Gly
 945 950 955 960
 Asn Gly Thr Ser Asn Ser Thr Leu Ser Gly Pro Gly Leu Asp Ser Lys
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 Pro Gly Lys Arg Ser Arg Thr Pro Ser Asn Asp Gly Lys Ser Lys Asp
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 Lys Pro Pro Lys Arg Lys Lys Ala Asp Thr Glu Gly Lys Ser Pro Ser
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 Ser His Ser Ser Ser Ser Ser Ser Ser Ala Ser Thr Ser Gly Lys
 1085 1090 1095
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 Ser Ser Met Tyr Ser Ser Gln Gly Ser Ser Gly Ser Ser Gln Ser
 1115 1120 1125
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 1145 1150 1155
 Pro Gln Gly Lys Pro Ser Ser Leu Met Asn Pro Ser Leu Ser Lys
 1160 1165 1170

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Ser	Lys	Ala	Lys	Ser	Pro	Ile	Ser	Ser	Gly	Ser	Gly	Gly	Ser	His
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Leu	Gly	Ser	Ser	Gly	Ser	Leu	Ser	Gln	Lys	Thr	Pro	Pro	Ser	Ser
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Lys	Leu	Lys	His	Gly	Val	Val	Thr	Ser	Gly	Pro	Gly	Gly	Glu	Asp
	1295					1300					1305			
Pro	Leu	Asp	Gly	Gln	Met	Gly	Val	Ser	Thr	Asn	Ser	Ser	Ser	His
	1310					1315					1320			
Pro	Met	Ser	Ser	Lys	His	Asn	Met	Ser	Gly	Gly	Glu	Phe	Gln	Gly
	1325					1330					1335			
Lys	Arg	Glu	Lys	Ser	Asp	Lys	Asp	Lys	Ser	Lys	Val	Ser	Thr	Ser
	1340					1345					1350			
Gly	Ser	Ser	Val	Asp	Ser	Ser	Lys	Lys	Thr	Ser	Glu	Ser	Lys	Asn
	1355					1360					1365			
Val	Gly	Ser	Thr	Gly	Val	Ala	Lys	Ile	Ile	Ile	Ser	Lys	His	Asp
	1370					1375					1380			
Gly	Gly	Ser	Pro	Ser	Ile	Lys	Ala	Lys	Val	Thr	Leu	Gln	Lys	Pro
	1385					1390					1395			
Gly	Glu	Ser	Ser	Gly	Glu	Gly	Leu	Arg	Pro	Gln	Met	Ala	Ser	Ser
	1400					1405					1410			
Lys	Asn	Tyr	Gly	Ser	Pro	Leu	Ile	Ser	Gly	Ser	Thr	Pro	Lys	His
	1415					1420					1425			
Glu	Arg	Gly	Ser	Pro	Ser	His	Ser	Lys	Ser	Pro	Ala	Tyr	Thr	Pro
	1430					1435					1440			
Gln	Asn	Leu	Asp	Ser	Glu	Ser	Glu	Ser	Gly	Ser	Ser	Ile	Ala	Glu
	1445					1450					1455			
Lys	Ser	Tyr	Gln	Asn	Ser	Pro	Ser	Ser	Asp	Asp	Gly	Ile	Arg	Pro
	1460					1465					1470			
Leu	Pro	Glu	Tyr	Ser	Thr	Glu	Lys	His	Lys	Lys	His	Lys	Lys	Glu
	1475					1480					1485			
Lys	Lys	Lys	Val	Lys	Asp	Lys	Asp	Arg	Asp	Arg	Asp	Arg	Asp	Lys
	1490					1495					1500			
Asp	Arg	Asp	Lys	Lys	Lys	Ser	His	Ser	Ile	Lys	Pro	Glu	Ser	Trp
	1505					1510					1515			
Ser	Lys	Ser	Pro	Ile	Ser	Ser	Asp	Gln	Ser	Leu	Ser	Met	Thr	Ser
	1520					1525					1530			
Asn	Thr	Ile	Leu	Ser	Ala	Asp	Arg	Pro	Ser	Arg	Leu	Ser	Pro	Asp
	1535					1540					1545			
Phe	Met	Ile	Gly	Glu	Glu	Asp	Asp	Asp	Leu	Met	Asp	Val	Ala	Leu
	1550					1555					1560			
Ile	Gly	Asn												
	1565													

<210> 31

<211> 1490

<212> PRT

<213> Homo sapiens


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<400> 31
Met Pro Asn Ser Glu Arg His Gly Gly Lys Lys Asp Gly Ser Gly Gly
1      5      10      15
Ala Ser Gly Thr Leu Gln Pro Ser Ser Gly Gly Gly Ser Ser Asn Ser
20      25      30
Arg Glu Arg His Arg Leu Val Ser Lys His Lys Arg His Lys Ser Lys
35      40      45
His Ser Lys Asp Met Gly Leu Val Thr Pro Glu Ala Ala Ser Leu Gly
50      55      60
Thr Val Ile Lys Pro Leu Val Glu Tyr Asp Asp Ile Ser Ser Asp Ser
65      70      75      80
Asp Thr Phe Ser Asp Asp Met Ala Phe Lys Leu Asp Arg Arg Glu Asn
85      90      95
Asp Glu Arg Arg Gly Ser Asp Arg Ser Asp Arg Leu His Lys His Arg
100     105     110
His His Gln His Arg Arg Ser Arg Asp Leu Leu Lys Ala Lys Gln Thr
115     120     125
Glu Lys Glu Lys Ser Gln Glu Val Ser Ser Lys Ser Gly Ser Met Lys
130     135     140
Asp Arg Ile Ser Gly Ser Ser Lys Arg Ser Asn Glu Glu Thr Asp Asp
145     150     155     160
Tyr Gly Lys Ala Gln Val Ala Lys Ser Ser Ser Lys Glu Ser Arg Ser
165     170     175
Ser Lys Leu His Lys Glu Lys Thr Arg Lys Glu Arg Glu Leu Lys Ser
180     185     190
Gly His Lys Asp Arg Ser Lys Ser His Arg Lys Arg Glu Thr Pro Lys
195     200     205
Ser Tyr Lys Thr Val Asp Ser Pro Lys Arg Arg Ser Arg Ser Pro His
210     215     220
Arg Lys Trp Ser Asp Ser Ser Lys Gln Asp Asp Ser Pro Ser Gly Ala
225     230     235     240
Ser Tyr Gly Gln Asp Tyr Asp Leu Ser Pro Ser Arg Ser His Thr Ser
245     250     255
Ser Asn Tyr Asp Ser Tyr Lys Lys Ser Pro Gly Ser Thr Ser Arg Arg
260     265     270
Gln Ser Val Ser Pro Pro Tyr Lys Glu Pro Ser Ala Tyr Gln Ser Ser
275     280     285
Thr Arg Ser Pro Ser Pro Tyr Ser Arg Arg Gln Arg Ser Val Ser Pro
290     295     300
Tyr Ser Arg Arg Arg Ser Ser Ser Tyr Glu Arg Ser Gly Ser Tyr Ser
305     310     315     320
Gly Arg Ser Pro Ser Pro Tyr Gly Arg Arg Ser Ser Ser Pro Phe
325     330     335
Leu Ser Lys Arg Ser Leu Ser Arg Ser Pro Leu Pro Ser Arg Lys Ser
340     345     350
Met Lys Ser Arg Ser Arg Ser Pro Ala Tyr Ser Arg His Ser Ser Ser
355     360     365
His Ser Lys Lys Lys Arg Ser Ser Ser Arg Ser Arg His Ser Ser Ile
370     375     380
Ser Pro Val Arg Leu Pro Leu Asn Ser Ser Leu Gly Ala Glu Leu Ser
385     390     395     400
Arg Lys Lys Lys Glu Arg Ala Ala Ala Ala Ala Ala Lys Met Asp
405     410     415
Gly Lys Glu Ser Lys Gly Ser Pro Val Phe Leu Pro Arg Lys Glu Asn
420     425     430
Ser Ser Val Glu Ala Lys Asp Ser Gly Leu Glu Ser Lys Lys Leu Pro
435     440     445
Arg Ser Val Lys Leu Glu Lys Ser Ala Pro Asp Thr Glu Leu Val Asn
450     455     460
Val Thr His Leu Asn Thr Glu Val Lys Asn Ser Ser Asp Thr Gly Lys
465     470     475     480
Val Lys Leu Asp Glu Asn Ser Glu Lys His Leu Val Lys Asp Leu Lys
485     490     495
Ala Gln Gly Thr Arg Asp Ser Lys Pro Ile Ala Leu Lys Glu Glu Ile
500     505     510

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Val Thr Pro Lys Glu Thr Glu Thr Ser Glu Lys Glu Thr Pro Pro Pro
 515 520 525
 Leu Pro Thr Ile Ala Ser Pro Pro Pro Pro Leu Pro Thr Thr Thr Pro
 530 535 540
 Pro Pro Gln Thr Pro Pro Leu Pro Pro Leu Pro Pro Ile Pro Ala Leu
 545 550 555 560
 Pro Gln Gln Pro Pro Leu Pro Pro Ser Gln Pro Ala Phe Ser Gln Val
 565 570 575
 Pro Ala Ser Ser Thr Ser Thr Leu Pro Pro Ser Thr His Ser Lys Thr
 580 585 590
 Ser Ala Val Ser Ser Gln Ala Asn Ser Gln Pro Pro Val Gln Val Ser
 595 600 605
 Val Lys Thr Gln Val Ser Val Thr Ala Ala Ile Pro His Leu Lys Thr
 610 615 620
 Ser Thr Leu Pro Pro Leu Pro Leu Pro Pro Leu Pro Gly Gly Asp
 625 630 635 640
 Asp Met Asp Ser Pro Lys Glu Thr Leu Pro Ser Lys Pro Val Lys Lys
 645 650 655
 Glu Lys Glu Gln Arg Thr Arg His Leu Leu Thr Asp Leu Pro Leu Pro
 660 665 670
 Pro Glu Leu Pro Gly Gly Asp Leu Ser Pro Pro Asp Ser Pro Glu Pro
 675 680 685
 Lys Ala Ile Thr Pro Pro Gln Gln Pro Tyr Lys Lys Arg Pro Lys Ile
 690 695 700
 Cys Cys Pro Arg Tyr Gly Glu Arg Arg Gln Thr Glu Ser Asp Trp Gly
 705 710 715 720
 Lys Arg Cys Val Asp Lys Phe Asp Ile Ile Gly Ile Ile Gly Glu Gly
 725 730 735
 Thr Tyr Gly Gln Val Tyr Lys Ala Arg Asp Lys Asp Thr Gly Glu Leu
 740 745 750
 Val Ala Leu Lys Lys Val Arg Leu Asp Asn Glu Lys Glu Gly Phe Pro
 755 760 765
 Ile Thr Ala Ile Arg Glu Ile Lys Ile Leu Arg Gln Leu Ile His Arg
 770 775 780
 Ser Val Val Asn Met Lys Glu Ile Val Thr Asp Lys Gln Asp Ala Leu
 785 790 795 800
 Asp Phe Lys Lys Asp Lys Gly Ala Phe Tyr Leu Val Phe Glu Tyr Met
 805 810 815
 Asp His Asp Leu Met Gly Leu Leu Glu Ser Gly Leu Val His Phe Ser
 820 825 830
 Glu Asp His Ile Lys Ser Phe Met Lys Gln Leu Met Glu Gly Leu Glu
 835 840 845
 Tyr Cys His Lys Lys Asn Phe Leu His Arg Asp Ile Lys Cys Ser Asn
 850 855 860
 Ile Leu Leu Asn Asn Ser Gly Gln Ile Lys Leu Ala Asp Phe Gly Leu
 865 870 875 880
 Ala Arg Leu Tyr Asn Ser Glu Glu Ser Arg Pro Tyr Thr Asn Lys Val
 885 890 895
 Ile Thr Leu Trp Tyr Arg Pro Pro Glu Leu Leu Gly Glu Glu Arg
 900 905 910
 Tyr Thr Pro Ala Ile Asp Val Trp Ser Cys Gly Cys Ile Leu Gly Glu
 915 920 925
 Leu Phe Thr Lys Lys Pro Ile Phe Gln Ala Asn Leu Glu Leu Ala Gln
 930 935 940
 Leu Glu Leu Ile Ser Arg Leu Cys Gly Ser Pro Cys Pro Ala Val Trp
 945 950 955 960
 Pro Asp Val Ile Lys Leu Pro Tyr Phe Asn Thr Met Lys Pro Lys Lys
 965 970 975
 Gln Tyr Arg Arg Arg Leu Arg Glu Glu Phe Ser Phe Ile Pro Ser Ala
 980 985 990
 Ala Leu Asp Leu Leu Asp His Met Leu Thr Leu Asp Pro Ser Lys Arg
 995 1000 1005
 Cys Thr Ala Glu Gln Thr Leu Gln Ser Asp Phe Leu Lys Asp Val
 1010 1015 1020
 Glu Leu Ser Lys Met Ala Pro Pro Asp Leu Pro His Trp Gln Asp
 1025 1030 1035

<212> PRT

<213> Homo sapiens

<400> 32

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Met Leu Thr Arg Leu Phe Ser Glu Pro Gly Leu Leu Ser Asp Val Pro
1      5      10      15
Lys Phe Ala Ser Trp Gly Asp Gly Glu Asp Asp Glu Pro Arg Ser Asp
20      25      30
Lys Gly Asp Ala Pro Pro Pro Pro Pro Ala Pro Gly Pro Gly Ala
35      40      45
Pro Gly Pro Ala Arg Ala Ala Lys Pro Val Pro Leu Arg Gly Glu Glu
50      55      60
Gly Thr Glu Ala Thr Leu Ala Glu Val Lys Glu Glu Gly Glu Leu Gly
65      70      75      80
Gly Glu Glu Glu Glu Glu Glu Glu Glu Glu Gly Leu Asp Glu Ala
85      90      95
Glu Gly Glu Arg Pro Lys Lys Arg Gly Pro Lys Lys Arg Lys Met Thr
100     105     110
Lys Ala Arg Leu Glu Arg Ser Lys Leu Arg Arg Gln Lys Ala Asn Ala
115     120     125
Arg Glu Arg Asn Arg Met His Asp Leu Asn Ala Ala Leu Asp Asn Leu
130     135     140
Arg Lys Val Val Pro Cys Tyr Ser Lys Thr Gln Lys Leu Ser Lys Ile
145     150     155     160
Glu Thr Leu Arg Leu Ala Lys Asn Tyr Ile Trp Ala Leu Ser Glu Ile
165     170     175
Leu Arg Ser Gly Lys Arg Pro Asp Leu Val Ser Tyr Val Gln Thr Leu
180     185     190
Cys Lys Gly Leu Ser Gln Pro Thr Thr Asn Leu Val Ala Gly Cys Leu
195     200     205
Gln Leu Asn Ser Arg Asn Phe Leu Thr Glu Gln Gly Ala Asp Gly Ala
210     215     220
Gly Arg Phe His Gly Ser Gly Gly Pro Phe Ala Met His Pro Tyr Pro
225     230     235     240
Tyr Pro Cys Ser Arg Leu Ala Gly Ala Gln Cys Gln Ala Ala Gly Gly
245     250     255
Leu Gly Gly Gly Ala Ala His Ala Leu Arg Thr His Gly Tyr Cys Ala
260     265     270
Ala Tyr Glu Thr Leu Tyr Ala Ala Ala Gly Gly Gly Gly Ala Ser Pro
275     280     285
Asp Tyr Asn Ser Ser Glu Tyr Glu Gly Pro Leu Ser Pro Pro Leu Cys
290     295     300
Leu Asn Gly Asn Phe Ser Leu Lys Gln Asp Ser Ser Pro Asp His Glu
305     310     315     320
Lys Ser Tyr His Tyr Ser Met His Tyr Ser Ala Leu Pro Gly Ser Arg
325     330     335
His Gly His Gly Leu Val Phe Gly Ser Ser Ala Val Arg Gly Gly Val
340     345     350
His Ser Glu Asn Leu Leu Ser Tyr Asp Met His Leu His His Asp Arg
355     360     365
Gly Pro Met Tyr Glu Glu Leu Asn Ala Phe Phe His Asn
370     375     380

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<210> 33

<211> 445

<212> PRT

<213> Homo sapiens

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<400> 33
Met Ser Lys Leu Pro Arg Glu Leu Thr Arg Asp Leu Glu Arg Ser Leu
1      5      10      15
Pro Ala Val Ala Ser Leu Gly Ser Ser Leu Ser His Ser Gln Ser Leu
20      25      30
Ser Ser His Leu Leu Pro Pro Pro Glu Lys Arg Arg Ala Ile Ser Asp
35      40      45
Val Arg Arg Thr Phe Cys Leu Phe Val Thr Phe Asp Leu Leu Phe Ile
50      55      60
Ser Leu Leu Trp Ile Ile Glu Leu Asn Thr Asn Thr Gly Ile Arg Lys
65      70      75      80
Asn Leu Glu Gln Glu Ile Ile Gln Tyr Asn Phe Lys Thr Ser Phe Phe
85      90      95
Asp Ile Phe Val Leu Ala Phe Phe Arg Phe Ser Gly Leu Leu Leu Gly
100     105     110
Tyr Ala Val Leu Gln Leu Arg His Trp Trp Val Ile Ala Val Thr Thr
115     120     125
Leu Val Ser Ser Ala Phe Leu Ile Val Lys Val Ile Leu Ser Glu Leu
130     135     140
Leu Ser Lys Gly Ala Phe Gly Tyr Leu Leu Pro Ile Val Ser Phe Val
145     150     155     160
Leu Ala Trp Leu Glu Thr Trp Phe Leu Asp Phe Lys Val Leu Pro Gln
165     170     175
Glu Ala Glu Glu Glu Arg Trp Tyr Leu Ala Ala Gln Val Ala Val Ala
180     185     190
Arg Gly Pro Leu Leu Phe Ser Gly Ala Leu Ser Glu Gly Gln Phe Tyr
195     200     205
Ser Pro Pro Glu Ser Phe Ala Gly Ser Asp Asn Glu Ser Asp Glu Glu
210     215     220
Val Ala Gly Lys Lys Ser Phe Ser Ala Gln Glu Arg Glu Tyr Ile Arg
225     230     235     240
Gln Gly Lys Glu Ala Thr Ala Val Val Asp Gln Ile Leu Ala Gln Glu
245     250     255
Glu Asn Trp Lys Phe Glu Lys Asn Asn Glu Tyr Gly Asp Thr Val Tyr
260     265     270
Thr Ile Glu Val Pro Phe His Gly Lys Thr Phe Ile Leu Lys Thr Phe
275     280     285
Leu Pro Cys Pro Ala Glu Leu Val Tyr Gln Glu Val Ile Leu Gln Pro
290     295     300
Glu Arg Met Val Leu Trp Asn Lys Thr Val Thr Ala Cys Gln Ile Leu
305     310     315     320
Gln Arg Val Glu Asp Asn Thr Leu Ile Ser Tyr Asp Val Ser Ala Gly
325     330     335
Ala Ala Gly Gly Val Val Ser Pro Arg Asp Phe Val Asn Val Arg Arg
340     345     350
Ile Glu Arg Arg Arg Asp Arg Tyr Leu Ser Ser Gly Ile Ala Thr Ser
355     360     365
His Ser Ala Lys Pro Pro Thr His Lys Tyr Val Arg Gly Glu Asn Gly
370     375     380
Pro Gly Gly Phe Ile Val Leu Lys Ser Ala Ser Asn Pro Arg Val Cys
385     390     395     400
Thr Phe Val Trp Ile Leu Asn Thr Asp Leu Lys Gly Arg Leu Pro Arg
405     410     415
Tyr Leu Ile His Gln Ser Leu Ala Ala Thr Met Phe Glu Phe Ala Phe
420     425     430
His Leu Arg Gln Arg Ile Ser Glu Leu Gly Ala Arg Ala
435     440     445
<210> 34
<211> 167
<212> PRT
<213> Homo sapiens

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<400> 34

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Met Ala Thr Ser Glu Leu Ser Cys Glu Val Ser Glu Glu Asn Cys Glu
1      5      10      15
Arg Arg Glu Ala Phe Trp Ala Glu Trp Lys Asp Leu Thr Leu Ser Thr
20     25     30
Arg Pro Glu Glu Gly Cys Ser Leu His Glu Glu Asp Thr Gln Arg His
35     40     45
Glu Thr Tyr His Gln Gln Gly Gln Cys Gln Val Leu Val Gln Arg Ser
50     55     60
Pro Trp Leu Met Met Arg Met Gly Ile Leu Gly Arg Gly Leu Gln Glu
65     70     75     80
Tyr Gln Leu Pro Tyr Gln Arg Val Leu Pro Leu Pro Ile Phe Thr Pro
85     90     95
Ala Lys Met Gly Ala Thr Lys Glu Glu Arg Glu Asp Thr Pro Ile Gln
100    105    110
Leu Gln Glu Leu Leu Ala Leu Glu Thr Ala Leu Gly Gly Gln Cys Val
115    120    125
Asp Arg Gln Glu Val Ala Glu Ile Thr Lys Gln Leu Pro Pro Val Val
130    135    140
Pro Val Ser Lys Pro Gly Ala Leu Arg Arg Ser Leu Ser Arg Ser Met
145    150    155    160
Ser Gln Glu Ala Gln Arg Gly
165

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<210> 35

<211> 282

<212> PRT

<213> Homo sapiens

<400> 35

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Met Ser Gly Ala Asp Arg Ser Pro Asn Ala Gly Ala Ala Pro Asp Ser
1      5      10      15
Ala Pro Gly Gln Ala Ala Val Ala Ser Ala Tyr Gln Arg Phe Glu Pro
20     25     30
Arg Ala Tyr Leu Arg Asn Asn Tyr Ala Pro Pro Arg Gly Asp Leu Cys
35     40     45
Asn Pro Asn Gly Val Gly Pro Trp Lys Leu Arg Cys Leu Ala Gln Thr
50     55     60
Phe Ala Thr Gly Glu Val Ser Gly Arg Thr Leu Ile Asp Ile Gly Ser
65     70     75     80
Gly Pro Thr Val Tyr Gln Leu Leu Ser Ala Cys Ser His Phe Glu Asp
85     90     95
Ile Thr Met Thr Asp Phe Leu Glu Val Asn Arg Gln Glu Leu Gly Arg
100    105    110
Trp Leu Gln Glu Glu Pro Gly Ala Phe Asn Trp Ser Met Tyr Ser Gln
115    120    125
His Ala Cys Leu Ile Glu Gly Lys Gly Glu Cys Trp Gln Asp Lys Glu
130    135    140
Arg Gln Leu Arg Ala Arg Val Lys Arg Val Leu Pro Ile Asp Val His
145    150    155    160
Gln Pro Gln Pro Leu Gly Ala Gly Ser Pro Ala Pro Leu Pro Ala Asp
165    170    175
Ala Leu Val Ser Ala Phe Cys Leu Glu Ala Val Ser Pro Asp Leu Ala
180    185    190
Ser Phe Gln Arg Ala Leu Asp His Ile Thr Thr Leu Leu Arg Pro Gly
195    200    205
Gly His Leu Leu Leu Ile Gly Ala Leu Glu Glu Ser Trp Tyr Leu Ala
210    215    220
Gly Glu Ala Arg Leu Thr Val Val Pro Val Ser Glu Glu Glu Val Arg
225    230    235    240

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<400>	36															
Met	Glu	Leu	Ala	Ala	Leu	Cys	Arg	Trp	Gly	Leu	Leu	Leu	Ala	Leu	Leu	
1				5					10					15		
Pro	Pro	Gly	Ala	Ala	Ser	Thr	Gln	Val	Cys	Thr	Gly	Thr	Asp	Met	Lys	
			20					25					30			
Leu	Arg	Leu	Pro	Ala	Ser	Pro	Glu	Thr	His	Leu	Asp	Met	Leu	Arg	His	
		35					40					45				
Leu	Tyr	Gln	Gly	Cys	Gln	Val	Val	Gln	Gly	Asn	Leu	Glu	Leu	Thr	Tyr	
	50					55					60					
Leu	Pro	Thr	Asn	Ala	Ser	Leu	Ser	Phe	Leu	Gln	Asp	Ile	Gln	Glu	Val	
65				70					75						80	
Gln	Gly	Tyr	Val	Leu	Ile	Ala	His	Asn	Gln	Val	Arg	Gln	Val	Pro	Leu	
				85					90					95		
Gln	Arg	Leu	Arg	Ile	Val	Arg	Gly	Thr	Gln	Leu	Phe	Glu	Asp	Asn	Tyr	
			100					105					110			
Ala	Leu	Ala	Val	Leu	Asp	Asn	Gly	Asp	Pro	Leu	Asn	Asn	Thr	Thr	Pro	
		115					120					125				
Val	Thr	Gly	Ala	Ser	Pro	Gly	Gly	Leu	Arg	Glu	Leu	Gln	Leu	Arg	Ser	
	130					135					140					
Leu	Thr	Glu	Ile	Leu	Lys	Gly	Gly	Val	Leu	Ile	Gln	Arg	Asn	Pro	Gln	
145				150					155						160	
Leu	Cys	Tyr	Gln	Asp	Thr	Ile	Leu	Trp	Lys	Asp	Ile	Phe	His	Lys	Asn	
				165					170					175		
Asn	Gln	Leu	Ala	Leu	Thr	Leu	Ile	Asp	Thr	Asn	Arg	Ser	Arg	Ala	Cys	
			180					185					190			
His	Pro	Cys	Ser	Pro	Met	Cys	Lys	Gly	Ser	Arg	Cys	Trp	Gly	Glu	Ser	
		195					200					205				
Ser	Glu	Asp	Cys	Gln	Ser	Leu	Thr	Arg	Thr	Val	Cys	Ala	Gly	Gly	Cys	
	210					215					220					
Ala	Arg	Cys	Lys	Gly	Pro	Leu	Pro	Thr	Asp	Cys	Cys	His	Glu	Gln	Cys	
225				230						235					240	
Ala	Ala	Gly	Cys	Thr	Gly	Pro	Lys	His	Ser	Asp	Cys	Leu	Ala	Cys	Leu	
				245					250					255		
His	Phe	Asn	His	Ser	Gly	Ile	Cys	Glu	Leu	His	Cys	Pro	Ala	Leu	Val	
			260					265					270			
Thr	Tyr	Asn	Thr	Asp	Thr	Phe	Glu	Ser	Met	Pro	Asn	Pro	Glu	Gly	Arg	
		275					280					285				
Tyr	Thr	Phe	Gly	Ala	Ser	Cys	Val	Thr	Ala	Cys	Pro	Tyr	Asn	Tyr	Leu	
	290					295					300					
Ser	Thr	Asp	Val	Gly	Ser	Cys	Thr	Leu	Val	Cys	Pro	Leu	His	Asn	Gln	
305				310						315					320	
Glu	Val	Thr	Ala	Glu	Asp	Gly	Thr	Gln	Arg	Cys	Glu	Lys	Cys	Ser	Lys	
</																

Pro Ala Ser Asn Thr Ala Pro Leu Gln Pro Glu Gln Leu Gln Val Phe
 385 390 395 400
 Glu Thr Leu Glu Glu Ile Thr Gly Tyr Leu Tyr Ile Ser Ala Trp Pro
 405 410 415
 Asp Ser Leu Pro Asp Leu Ser Val Phe Gln Asn Leu Gln Val Ile Arg
 420 425 430
 Gly Arg Ile Leu His Asn Gly Ala Tyr Ser Leu Thr Leu Gln Gly Leu
 435 440 445
 Gly Ile Ser Trp Leu Gly Leu Arg Ser Leu Arg Glu Leu Gly Ser Gly
 450 455 460
 Leu Ala Leu Ile His His Asn Thr His Leu Cys Phe Val His Thr Val
 465 470 475 480
 Pro Trp Asp Gln Leu Phe Arg Asn Pro His Gln Ala Leu Leu His Thr
 485 490 495
 Ala Asn Arg Pro Glu Asp Glu Cys Val Gly Glu Gly Leu Ala Cys His
 500 505 510
 Gln Leu Cys Ala Arg Gly His Cys Trp Gly Pro Gly Pro Thr Gln Cys
 515 520 525
 Val Asn Cys Ser Gln Phe Leu Arg Gly Gln Glu Cys Val Glu Glu Cys
 530 535 540
 Arg Val Leu Gln Gly Leu Pro Arg Glu Tyr Val Asn Ala Arg His Cys
 545 550 555 560
 Leu Pro Cys His Pro Glu Cys Gln Pro Gln Asn Gly Ser Val Thr Cys
 565 570 575
 Phe Gly Pro Glu Ala Asp Gln Cys Val Ala Cys Ala His Tyr Lys Asp
 580 585 590
 Pro Pro Phe Cys Val Ala Arg Cys Pro Ser Gly Val Lys Pro Asp Leu
 595 600 605
 Ser Tyr Met Pro Ile Trp Lys Phe Pro Asp Glu Glu Gly Ala Cys Gln
 610 615 620
 Pro Cys Pro Ile Asn Cys Thr His Ser Cys Val Asp Leu Asp Asp Lys
 625 630 635 640
 Gly Cys Pro Ala Glu Gln Arg Ala Ser Pro Leu Thr Ser Ile Val Ser
 645 650 655
 Ala Val Val Gly Ile Leu Leu Val Val Val Leu Gly Val Val Phe Gly
 660 665 670
 Ile Leu Ile Lys Arg Arg Gln Gln Lys Ile Arg Lys Tyr Thr Met Arg
 675 680 685
 Arg Leu Leu Gln Glu Thr Glu Leu Val Glu Pro Leu Thr Pro Ser Gly
 690 695 700
 Ala Met Pro Asn Gln Ala Gln Met Arg Ile Leu Lys Glu Thr Glu Leu
 705 710 715 720
 Arg Lys Val Lys Val Leu Gly Ser Gly Ala Phe Gly Thr Val Tyr Lys
 725 730 735
 Gly Ile Trp Ile Pro Asp Gly Glu Asn Val Lys Ile Pro Val Ala Ile
 740 745 750
 Lys Val Leu Arg Glu Asn Thr Ser Pro Lys Ala Asn Lys Glu Ile Leu
 755 760 765
 Asp Glu Ala Tyr Val Met Ala Gly Val Gly Ser Pro Tyr Val Ser Arg
 770 775 780
 Leu Leu Gly Ile Cys Leu Thr Ser Thr Val Gln Leu Val Thr Gln Leu
 785 790 795 800
 Met Pro Tyr Gly Cys Leu Leu Asp His Val Arg Glu Asn Arg Gly Arg
 805 810 815
 Leu Gly Ser Gln Asp Leu Leu Asn Trp Cys Met Gln Ile Ala Lys Gly
 820 825 830
 Met Ser Tyr Leu Glu Asp Val Arg Leu Val His Arg Asp Leu Ala Ala
 835 840 845
 Arg Asn Val Leu Val Lys Ser Pro Asn His Val Lys Ile Thr Asp Phe
 850 855 860
 Gly Leu Ala Arg Leu Leu Asp Ile Asp Glu Thr Glu Tyr His Ala Asp
 865 870 875 880
 Gly Gly Lys Val Pro Ile Lys Trp Met Ala Leu Glu Ser Ile Leu Arg
 885 890 895
 Arg Arg Phe Thr His Gln Ser Asp Val Trp Ser Tyr Gly Val Thr Val
 900 905 910

<213> Homo sapiens

Met	Glu	Leu	Asp	Leu	Ser	Pro	Pro	His	Leu	Ser	Ser	Ser	Pro	Glu	Asp
1			5					10					15		
Leu	Trp	Pro	Ala	Pro	Gly	Thr	Pro	Pro	Gly	Thr	Pro	Arg	Pro	Pro	Asp
			20					25					30		
Thr	Pro	Leu	Pro	Glu	Glu	Val	Lys	Arg	Ser	Gln	Pro	Leu	Leu	Ile	Pro
		35					40					45			
Thr	Thr	Gly	Arg	Lys	Leu	Arg	Glu	Glu	Glu	Arg	Arg	Ala	Thr	Ser	Leu
	50					55					60				

Pro Ser Ile Pro Asn Pro Phe Pro Glu Leu Cys Ser Pro Pro Ser Gln
 65 70 75 80
 Ser Pro Ile Leu Gly Gly Pro Ser Ser Ala Arg Gly Leu Leu Pro Arg
 85 90 95
 Asp Ala Ser Arg Pro His Val Val Lys Val Tyr Ser Glu Asp Gly Ala
 100 105 110
 Cys Arg Ser Val Glu Val Ala Ala Gly Ala Thr Ala Arg His Val Cys
 115 120 125
 Glu Met Leu Val Gln Arg Ala His Ala Leu Ser Asp Glu Thr Trp Gly
 130 135 140
 Leu Val Glu Cys His Pro His Leu Ala Leu Glu Arg Gly Leu Glu Asp
 145 150 155 160
 His Glu Ser Val Val Glu Val Gln Ala Ala Trp Pro Val Gly Gly Asp
 165 170 175
 Ser Arg Phe Val Phe Arg Lys Asn Phe Ala Lys Tyr Glu Leu Phe Lys
 180 185 190
 Ser Ser Pro His Ser Leu Phe Pro Glu Lys Met Val Ser Ser Cys Leu
 195 200 205
 Asp Ala His Thr Gly Ile Ser His Glu Asp Leu Ile Gln Asn Phe Leu
 210 215 220
 Asn Ala Gly Ser Phe Pro Glu Ile Gln Gly Phe Leu Gln Leu Arg Gly
 225 230 235 240
 Ser Gly Arg Lys Leu Trp Lys Arg Phe Phe Cys Phe Leu Arg Arg Ser
 245 250 255
 Gly Leu Tyr Tyr Ser Thr Lys Gly Thr Ser Lys Asp Pro Arg His Leu
 260 265 270
 Gln Tyr Val Ala Asp Val Asn Glu Ser Asn Val Tyr Val Val Thr Gln
 275 280 285
 Gly Arg Lys Leu Tyr Gly Met Pro Thr Asp Phe Gly Phe Cys Val Lys
 290 295 300
 Pro Asn Lys Leu Arg Asn Gly His Lys Gly Leu Arg Ile Phe Cys Ser
 305 310 315 320
 Glu Asp Glu Gln Ser Arg Thr Cys Trp Leu Ala Ala Phe Arg Leu Phe
 325 330 335
 Lys Tyr Gly Val Gln Leu Tyr Lys Asn Tyr Gln Gln Ala Gln Ser Arg
 340 345 350
 His Leu His Pro Ser Cys Leu Gly Ser Pro Pro Leu Arg Ser Ala Ser
 355 360 365
 Asp Asn Thr Leu Val Ala Met Asp Phe Ser Gly His Ala Gly Arg Val
 370 375 380
 Ile Glu Asn Pro Arg Glu Ala Leu Ser Val Ala Leu Glu Glu Ala Gln
 385 390 395 400
 Ala Trp Arg Lys Lys Thr Asn His Arg Leu Ser Leu Pro Met Pro Ala
 405 410 415
 Ser Gly Thr Ser Leu Ser Ala Ala Ile His Arg Thr Gln Leu Trp Phe
 420 425 430
 His Gly Arg Ile Ser Arg Glu Glu Ser Gln Arg Leu Ile Gly Gln Gln
 435 440 445
 Gly Leu Val Asp Gly Leu Phe Leu Val Arg Glu Ser Gln Arg Asn Pro
 450 455 460
 Gln Gly Phe Val Leu Ser Leu Cys His Leu Gln Lys Val Lys His Tyr
 465 470 475 480
 Leu Ile Leu Pro Ser Glu Glu Glu Gly Arg Leu Tyr Phe Ser Met Asp
 485 490 495
 Asp Gly Gln Thr Arg Phe Thr Asp Leu Leu Gln Leu Val Glu Phe His
 500 505 510
 Gln Leu Asn Arg Gly Ile Leu Pro Cys Leu Leu Arg His Cys Cys Thr
 515 520 525
 Arg Val Ala Leu
 530
 <210> 38
 <211> 534
 <212> PRT

<213> Homo sapiens

<400> 38

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Met Lys Gln Glu Gly Ser Ala Arg Arg Arg Gly Ala Asp Lys Ala Lys
1      5      10      15
Pro Pro Pro Gly Gly Gly Glu Gln Glu Pro Pro Pro Pro Ala Pro
20      25      30
Gln Asp Val Glu Met Lys Glu Glu Ala Ala Thr Gly Gly Gly Ser Thr
35      40      45
Gly Glu Ala Asp Gly Lys Thr Ala Ala Ala Ala Val Glu His Ser Gln
50      55      60
Arg Glu Leu Asp Thr Val Thr Leu Glu Asp Ile Lys Glu His Val Lys
65      70      75      80
Gln Leu Glu Lys Ala Val Ser Gly Lys Glu Pro Arg Phe Val Leu Arg
85      90      95
Ala Leu Arg Met Leu Pro Ser Thr Ser Arg Arg Leu Asn His Tyr Val
100     105     110
Leu Tyr Lys Ala Val Gln Gly Phe Phe Thr Ser Asn Asn Ala Thr Arg
115     120     125
Asp Phe Leu Leu Pro Phe Leu Glu Glu Pro Met Asp Thr Glu Ala Asp
130     135     140
Leu Gln Phe Arg Pro Arg Thr Gly Lys Ala Ala Ser Thr Pro Leu Leu
145     150     155     160
Pro Glu Val Glu Ala Tyr Leu Gln Leu Leu Val Val Ile Phe Met Met
165     170     175
Asn Ser Lys Arg Tyr Lys Glu Ala Gln Lys Ile Ser Asp Asp Leu Met
180     185     190
Gln Lys Ile Ser Thr Gln Asn Arg Arg Ala Leu Asp Leu Val Ala Ala
195     200     205
Lys Cys Tyr Tyr Tyr His Ala Arg Val Tyr Glu Phe Leu Asp Lys Leu
210     215     220
Asp Val Val Arg Ser Phe Leu His Ala Arg Leu Arg Thr Ala Thr Leu
225     230     235     240
Arg His Asp Ala Asp Gly Gln Ala Thr Leu Leu Asn Leu Leu Leu Arg
245     250     255
Asn Tyr Leu His Tyr Ser Leu Tyr Asp Gln Ala Glu Lys Leu Val Ser
260     265     270
Lys Ser Val Phe Pro Glu Gln Ala Asn Asn Asn Glu Trp Ala Arg Tyr
275     280     285
Leu Tyr Tyr Thr Gly Arg Ile Lys Ala Ile Gln Leu Glu Tyr Ser Glu
290     295     300
Ala Arg Arg Thr Met Thr Asn Ala Leu Arg Lys Ala Pro Gln His Thr
305     310     315     320
Ala Val Gly Phe Lys Gln Thr Val His Lys Leu Leu Ile Val Val Glu
325     330     335
Leu Leu Leu Gly Glu Ile Pro Asp Arg Leu Gln Phe Arg Gln Pro Ser
340     345     350
Leu Lys Arg Ser Leu Met Pro Tyr Phe Leu Leu Thr Gln Ala Val Arg
355     360     365
Thr Gly Asn Leu Ala Lys Phe Asn Gln Val Leu Asp Gln Phe Gly Glu
370     375     380
Lys Phe Gln Ala Asp Gly Thr Tyr Thr Leu Ile Ile Arg Leu Arg His
385     390     395     400
Asn Val Ile Lys Thr Gly Val Arg Met Ile Ser Leu Ser Tyr Ser Arg
405     410     415
Ile Ser Leu Ala Asp Ile Ala Gln Lys Leu Gln Leu Asp Ser Pro Glu
420     425     430
Asp Ala Glu Phe Ile Val Ala Lys Ala Ile Arg Asp Gly Val Ile Glu
435     440     445
Ala Ser Ile Asn His Glu Lys Gly Tyr Val Gln Ser Lys Glu Met Ile
450     455     460
Asp Ile Tyr Ser Thr Arg Glu Pro Gln Leu Ala Phe His Gln Arg Ile
465     470     475     480

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Ser Phe Cys Leu Asp Ile His Asn Met Ser Val Lys Ala Met Arg Phe
 485 490 495
 Pro Pro Lys Ser Tyr Asn Lys Asp Leu Glu Ser Ala Glu Glu Arg Arg
 500 505 510
 Glu Arg Glu Gln Gln Asp Leu Glu Phe Ala Lys Glu Met Ala Glu Asp
 515 520 525
 Asp Asp Asp Ser Phe Pro
 530
 <210> 39
 <211> 207
 <212> PRT
 <213> Homo sapiens

<400> 39
 Met Ala Gly Pro Ala Thr Gln Ser Pro Met Lys Leu Met Ala Leu Gln
 1 5 10 15
 Leu Leu Leu Trp His Ser Ala Leu Trp Thr Val Gln Glu Ala Thr Pro
 20 25 30
 Leu Gly Pro Ala Ser Ser Leu Pro Gln Ser Phe Leu Leu Lys Cys Leu
 35 40 45
 Glu Gln Val Arg Lys Ile Gln Gly Asp Gly Ala Ala Leu Gln Glu Lys
 50 55 60
 Leu Val Ser Glu Cys Ala Thr Tyr Lys Leu Cys His Pro Glu Glu Leu
 65 70 75 80
 Val Leu Leu Gly His Ser Leu Gly Ile Pro Trp Ala Pro Leu Ser Ser
 85 90 95
 Cys Pro Ser Gln Ala Leu Gln Leu Ala Gly Cys Leu Ser Gln Leu His
 100 105 110
 Ser Gly Leu Phe Leu Tyr Gln Gly Leu Leu Gln Ala Leu Glu Gly Ile
 115 120 125
 Ser Pro Glu Leu Gly Pro Thr Leu Asp Thr Leu Gln Leu Asp Val Ala
 130 135 140
 Asp Phe Ala Thr Thr Ile Trp Gln Gln Met Glu Glu Leu Gly Met Ala
 145 150 155 160
 Pro Ala Leu Gln Pro Thr Gln Gly Ala Met Pro Ala Phe Ala Ser Ala
 165 170 175
 Phe Gln Arg Arg Ala Gly Gly Val Leu Val Ala Ser His Leu Gln Ser
 180 185 190
 Phe Leu Glu Val Ser Tyr Arg Val Leu Arg His Leu Ala Gln Pro
 195 200 205
 <210> 40
 <211> 989
 <212> PRT
 <213> Homo sapiens

<400> 40
 Met Lys Val Val Asn Leu Lys Gln Ala Ile Leu Gln Ala Trp Lys Glu
 1 5 10 15
 Arg Trp Ser Tyr Tyr Gln Trp Ala Ile Asn Met Lys Lys Phe Phe Pro
 20 25 30
 Lys Gly Ala Thr Trp Asp Ile Leu Asn Leu Ala Asp Ala Leu Leu Glu
 35 40 45
 Gln Ala Met Ile Gly Pro Ser Pro Asn Pro Leu Ile Leu Ser Tyr Leu
 50 55 60
 Lys Tyr Ala Ile Ser Ser Gln Met Val Ser Tyr Ser Ser Val Leu Thr
 65 70 75 80

Ala	Ile	Ser	Lys	Phe	Asp	Asp	Phe	Ser	Arg	Asp	Leu	Cys	Val	Gln	Ala
				85					90					95	
Leu	Leu	Asp	Ile	Met	Asp	Met	Phe	Cys	Asp	Arg	Leu	Ser	Cys	His	Gly
			100					105					110		
Lys	Ala	Glu	Glu	Cys	Ile	Gly	Leu	Cys	Arg	Ala	Leu	Leu	Ser	Ala	Leu
		115					120					125			
His	Trp	Leu	Leu	Arg	Cys	Thr	Ala	Ala	Ser	Ala	Glu	Arg	Leu	Arg	Glu
	130					135					140				
Gly	Leu	Glu	Ala	Gly	Thr	Pro	Ala	Ala	Gly	Glu	Lys	Gln	Leu	Ala	Met
145					150					155					160
Cys	Leu	Gln	Arg	Leu	Glu	Lys	Thr	Leu	Ser	Ser	Thr	Lys	Asn	Arg	Ala
			165						170					175	
Leu	Leu	His	Ile	Ala	Lys	Leu	Glu	Glu	Ala	Ser	Ser	Trp	Thr	Ala	Ile
			180						185				190		
Glu	His	Ser	Leu	Leu	Lys	Leu	Gly	Glu	Ile	Leu	Thr	Asn	Leu	Ser	Asn
		195					200					205			
Pro	Gln	Leu	Arg	Ser	Gln	Ala	Glu	Gln	Cys	Gly	Thr	Leu	Ile	Arg	Ser
	210					215					220				
Ile	Pro	Thr	Met	Leu	Ser	Val	His	Ala	Glu	Gln	Met	His	Lys	Thr	Gly
225					230					235					240
Phe	Pro	Thr	Val	His	Ala	Val	Ile	Leu	Leu	Glu	Gly	Thr	Met	Asn	Leu
			245						250					255	
Thr	Gly	Glu	Thr	Gln	Ser	Leu	Val	Glu	Gln	Leu	Thr	Met	Val	Lys	Arg
			260						265				270		
Met	Gln	His	Ile	Pro	Thr	Pro	Leu	Phe	Val	Leu	Glu	Ile	Trp	Lys	Ala
		275					280					285			
Cys	Phe	Val	Gly	Leu	Ile	Glu	Ser	Pro	Glu	Gly	Thr	Glu	Glu	Leu	Lys
	290					295					300				
Trp	Thr	Ala	Phe	Thr	Phe	Leu	Lys	Ile	Pro	Gln	Val	Leu	Val	Lys	Leu
305					310					315					320
Lys	Lys	Tyr	Ser	His	Gly	Asp	Lys	Asp	Phe	Thr	Glu	Asp	Val	Asn	Cys
			325						330					335	
Ala	Phe	Glu	Phe	Leu	Leu	Lys	Leu	Thr	Pro	Leu	Leu	Asp	Lys	Ala	Asp
			340						345				350		
Gln	Arg	Cys	Asn	Cys	Asp	Cys	Thr	Asn	Phe	Leu	Leu	Gln	Glu	Cys	Gly
		355					360					365			
Lys	Gln	Gly	Leu	Leu	Ser	Glu	Ala	Ser	Val	Asn	Asn	Leu	Met	Ala	Lys
		370				375					380				
Arg	Lys	Ala	Asp	Arg	Glu	His	Ala	Pro	Gln	Gln	Lys	Ser	Gly	Glu	Asn
385					390					395					400
Ala	Asn	Ile	Gln	Pro	Asn	Ile	Gln	Leu	Ile	Leu	Arg	Ala	Glu	Pro	Thr
			405						410					415	
Val	Thr	Asn	Ile	Leu	Lys	Thr	Met	Asp	Ala	Asp	His	Ser	Lys	Ser	Pro
		420							425				430		
Glu	Gly	Leu	Leu	Gly	Val	Leu	Gly	His	Met	Leu	Ser	Gly	Lys	Ser	Leu
		435					440					445			
Asp	Leu	Leu	Leu	Ala	Ala	Ala	Ala	Ala	Thr	Gly	Lys	Leu	Lys	Ser	Phe
	450					455					460				
Ala	Arg	Lys	Phe	Ile	Asn	Leu	Asn	Glu	Phe	Thr	Thr	Tyr	Gly	Ser	Glu
465					470					475					480
Glu	Ser	Thr	Lys	Pro	Ala	Ser	Val	Arg	Ala	Leu	Leu	Phe	Asp	Ile	Ser
			485						490					495	
Phe	Leu	Met	Leu	Cys	His	Val	Ala	Gln	Thr	Tyr	Gly	Ser	Glu	Val	Ile
		500							505				510		
Leu	Ser	Glu	Ser	Arg	Thr	Gly	Ala	Glu	Val	Pro	Phe	Phe	Glu	Thr	Trp
		515					520					525			
Met	Gln	Thr	Cys	Met	Pro	Glu	Glu	Gly	Lys	Ile	Leu	Asn	Pro	Asp	His
		530				535					540				
Pro	Cys	Phe	Arg	Pro	Asp	Ser	Thr	Lys	Val	Glu	Ser	Leu	Val	Ala	Leu
545					550					555					560
Leu	Asn	Asn	Ser	Ser	Glu	Met	Lys	Leu	Val	Gln	Met	Lys	Trp	His	Glu
			565						570					575	
Ala	Cys	Leu	Ser	Ile	Ser	Ala	Ala	Ile	Leu	Glu	Ile	Leu	Asn	Ala	Trp
			580						585				590		
Glu	Asn	Gly	Val	Leu	Ala	Phe	Glu	Ser	Ile	Gln	Lys	Ile	Thr	Asp	Asn
		595					600					605			

Ile Lys Gly Lys Val Cys Ser Leu Ala Val Cys Ala Val Ala Trp Leu
 610 615 620
 Val Ala His Val Arg Met Leu Gly Leu Asp Glu Arg Glu Lys Ser Leu
 625 630 635 640
 Gln Met Ile Arg Gln Leu Ala Gly Pro Leu Phe Ser Glu Asn Thr Leu
 645 650 655
 Gln Phe Tyr Asn Glu Arg Val Val Ile Met Asn Ser Ile Leu Glu Arg
 660 665 670
 Met Cys Ala Asp Val Leu Gln Gln Thr Ala Thr Gln Ile Lys Phe Pro
 675 680 685
 Ser Thr Gly Val Asp Thr Met Pro Tyr Trp Asn Leu Leu Pro Pro Lys
 690 695 700
 Arg Pro Ile Lys Glu Val Leu Thr Asp Ile Phe Ala Lys Val Leu Glu
 705 710 715 720
 Lys Gly Trp Val Asp Ser Arg Ser Ile His Ile Phe Asp Thr Leu Leu
 725 730 735
 His Met Gly Gly Val Tyr Trp Phe Cys Asn Asn Leu Ile Lys Glu Leu
 740 745 750
 Leu Lys Glu Thr Arg Lys Glu His Thr Leu Arg Ala Val Glu Leu Leu
 755 760 765
 Tyr Ser Ile Phe Cys Leu Asp Met Gln Gln Val Thr Leu Val Leu Leu
 770 775 780
 Gly His Ile Leu Pro Gly Leu Leu Thr Asp Ser Ser Lys Trp His Ser
 785 790 795 800
 Leu Met Asp Pro Pro Gly Thr Ala Leu Ala Lys Leu Ala Val Trp Cys
 805 810 815
 Ala Leu Ser Ser Tyr Ser Ser His Lys Gly Gln Ala Ser Thr Arg Gln
 820 825 830
 Lys Lys Arg His Arg Glu Asp Ile Glu Asp Tyr Ile Ser Leu Phe Pro
 835 840 845
 Leu Asp Asp Val Gln Pro Ser Lys Leu Met Arg Leu Leu Ser Ser Asn
 850 855 860
 Glu Asp Asp Ala Asn Ile Leu Ser Ser Pro Thr Asp Arg Ser Met Ser
 865 870 875 880
 Ser Ser Leu Ser Ala Ser Gln Leu His Thr Val Asn Met Arg Asp Pro
 885 890 895
 Leu Asn Arg Val Leu Ala Asn Leu Phe Leu Leu Ile Ser Ser Ile Leu
 900 905 910
 Gly Ser Arg Thr Ala Gly Pro His Thr Gln Phe Val Gln Trp Phe Met
 915 920 925
 Glu Glu Cys Val Asp Cys Leu Glu Gln Gly Gly Arg Gly Ser Val Leu
 930 935 940
 Gln Phe Met Pro Phe Thr Thr Val Ser Glu Leu Val Lys Val Ser Ala
 945 950 955 960
 Met Ser Ser Pro Lys Val Val Leu Ala Ile Thr Asp Leu Ser Leu Pro
 965 970 975
 Leu Gly Arg Gln Val Ala Ala Lys Ala Ile Ala Ala Leu
 980 985

<210> 41

<211> 490

<212> PRT

<213> Homo sapiens

<400> 41

Met Glu Gln Lys Pro Ser Lys Val Glu Cys Gly Ser Asp Pro Glu Glu
 1 5 10 15
 Asn Ser Ala Arg Ser Pro Asp Gly Lys Arg Lys Arg Lys Asn Gly Gln
 20 25 30
 Cys Ser Leu Lys Thr Ser Met Ser Gly Tyr Ile Pro Ser Tyr Leu Asp
 35 40 45

Lys Asp Glu Gln Cys Val Val Cys Gly Asp Lys Ala Thr Gly Tyr His
 50 55 60
 Tyr Arg Cys Ile Thr Cys Glu Gly Cys Lys Gly Phe Phe Arg Arg Thr
 65 70 75 80
 Ile Gln Lys Asn Leu His Pro Thr Tyr Ser Cys Lys Tyr Asp Ser Cys
 85 90 95
 Cys Val Ile Asp Lys Ile Thr Arg Asn Gln Cys Gln Leu Cys Arg Phe
 100 105 110
 Lys Lys Cys Ile Ala Val Gly Met Ala Met Asp Leu Val Leu Asp Asp
 115 120 125
 Ser Lys Arg Val Ala Lys Arg Lys Leu Ile Glu Gln Asn Arg Glu Arg
 130 135 140
 Arg Arg Lys Glu Glu Met Ile Arg Ser Leu Gln Gln Arg Pro Glu Pro
 145 150 155 160
 Thr Pro Glu Glu Trp Asp Leu Ile His Ile Ala Thr Glu Ala His Arg
 165 170 175
 Ser Thr Asn Ala Gln Gly Ser His Trp Lys Gln Arg Arg Lys Phe Leu
 180 185 190
 Pro Asp Asp Ile Gly Gln Ser Pro Ile Val Ser Met Pro Asp Gly Asp
 195 200 205
 Lys Val Asp Leu Glu Ala Phe Ser Glu Phe Thr Lys Ile Ile Thr Pro
 210 215 220
 Ala Ile Thr Arg Val Val Asp Phe Ala Lys Lys Leu Pro Met Phe Ser
 225 230 235 240
 Glu Leu Pro Cys Glu Asp Gln Ile Ile Leu Leu Lys Gly Cys Cys Met
 245 250 255
 Glu Ile Met Ser Leu Arg Ala Ala Val Arg Tyr Asp Pro Glu Ser Asp
 260 265 270
 Thr Leu Thr Leu Ser Gly Glu Met Ala Val Lys Arg Glu Gln Leu Lys
 275 280 285
 Asn Gly Gly Leu Gly Val Val Ser Asp Ala Ile Phe Glu Leu Gly Lys
 290 295 300
 Ser Leu Ser Ala Phe Asn Leu Asp Asp Thr Glu Val Ala Leu Leu Gln
 305 310 315 320
 Ala Val Leu Leu Met Ser Thr Asp Arg Ser Gly Leu Leu Cys Val Asp
 325 330 335
 Lys Ile Glu Lys Ser Gln Glu Ala Tyr Leu Leu Ala Phe Glu His Tyr
 340 345 350
 Val Asn His Arg Lys His Asn Ile Pro His Phe Trp Pro Lys Leu Leu
 355 360 365
 Met Lys Glu Arg Glu Val Gln Ser Ser Ile Leu Tyr Lys Gly Ala Ala
 370 375 380
 Ala Glu Gly Arg Pro Gly Gly Ser Leu Gly Val His Pro Glu Gly Gln
 385 390 395 400
 Gln Leu Leu Gly Met His Val Val Gln Gly Pro Gln Val Arg Gln Leu
 405 410 415
 Glu Gln Gln Leu Gly Glu Ala Gly Ser Leu Gln Gly Pro Val Leu Gln
 420 425 430
 His Gln Ser Pro Lys Ser Pro Gln Gln Arg Leu Leu Glu Leu His
 435 440 445
 Arg Ser Gly Ile Leu His Ala Arg Ala Val Cys Gly Glu Asp Asp Ser
 450 455 460
 Ser Glu Ala Asp Ser Pro Ser Ser Ser Glu Glu Pro Glu Val Cys
 465 470 475 480
 Glu Asp Leu Ala Gly Asn Ala Ala Ser Pro
 485 490

<210> 42

<211> 614

<212> PRT

<213> Homo sapiens

<400> 42
 Met Thr Thr Leu Asp Ser Asn Asn Asn Thr Gly Gly Val Ile Thr Tyr
 1 5 10 15
 Ile Gly Ser Ser Gly Ser Ser Pro Ser Arg Thr Ser Pro Glu Ser Leu
 20 25 30
 Tyr Ser Asp Asn Ser Asn Gly Ser Phe Gln Ser Leu Thr Gln Gly Cys
 35 40 45
 Pro Thr Tyr Phe Pro Pro Ser Pro Thr Gly Ser Leu Thr Gln Asp Pro
 50 55 60
 Ala Arg Ser Phe Gly Ser Ile Pro Pro Ser Leu Ser Asp Asp Gly Ser
 65 70 75 80
 Pro Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Phe Tyr Asn
 85 90 95
 Gly Ser Pro Pro Gly Ser Leu Gln Val Ala Met Glu Asp Ser Ser Arg
 100 105 110
 Val Ser Pro Ser Lys Ser Thr Ser Asn Ile Thr Lys Leu Asn Gly Met
 115 120 125
 Val Leu Cys Lys Val Cys Gly Asp Val Ala Ser Gly Phe His Tyr
 130 135 140
 Gly Val Leu Ala Cys Glu Gly Cys Lys Gly Phe Phe Arg Arg Ser Ile
 145 150 155 160
 Gln Gln Asn Ile Gln Tyr Lys Arg Cys Leu Lys Asn Glu Asn Cys Ser
 165 170 175
 Ile Val Arg Ile Asn Arg Asn Arg Cys Gln Gln Cys Arg Phe Lys Lys
 180 185 190
 Cys Leu Ser Val Gly Met Ser Arg Asp Ala Val Arg Phe Gly Arg Ile
 195 200 205
 Pro Lys Arg Glu Lys Gln Arg Met Leu Ala Glu Met Gln Ser Ala Met
 210 215 220
 Asn Leu Ala Asn Asn Gln Leu Ser Ser Gln Cys Pro Leu Glu Thr Ser
 225 230 235 240
 Pro Thr Gln His Pro Thr Pro Gly Pro Met Gly Pro Ser Pro Pro Pro
 245 250 255
 Ala Pro Val Pro Ser Pro Leu Val Gly Phe Ser Gln Phe Pro Gln Gln
 260 265 270
 Leu Thr Pro Pro Arg Ser Pro Ser Pro Glu Pro Thr Val Glu Asp Val
 275 280 285
 Ile Ser Gln Val Ala Arg Ala His Arg Glu Ile Phe Thr Tyr Ala His
 290 295 300
 Asp Lys Leu Gly Ser Ser Pro Gly Asn Phe Asn Ala Asn His Ala Ser
 305 310 315 320
 Gly Ser Pro Pro Ala Thr Thr Pro His Arg Trp Glu Asn Gln Gly Cys
 325 330 335
 Pro Pro Ala Pro Asn Asp Asn Asn Thr Leu Ala Ala Gln Arg His Asn
 340 345 350
 Glu Ala Leu Asn Gly Leu Arg Gln Ala Pro Ser Ser Tyr Pro Pro Thr
 355 360 365
 Trp Pro Pro Gly Pro Ala His His Ser Cys His Gln Ser Asn Ser Asn
 370 375 380
 Gly His Arg Leu Cys Pro Thr His Val Tyr Ala Ala Pro Glu Gly Lys
 385 390 395 400
 Ala Pro Ala Asn Ser Pro Arg Gln Gly Asn Ser Lys Asn Val Leu Leu
 405 410 415
 Ala Cys Pro Met Asn Met Tyr Pro His Gly Arg Ser Gly Arg Thr Val
 420 425 430
 Gln Glu Ile Trp Glu Asp Phe Ser Met Ser Phe Thr Pro Ala Val Arg
 435 440 445
 Glu Val Val Glu Phe Ala Lys His Ile Pro Gly Phe Arg Asp Leu Ser
 450 455 460
 Gln His Asp Gln Val Thr Leu Leu Lys Ala Gly Thr Phe Glu Val Leu
 465 470 475 480
 Met Val Arg Phe Ala Ser Leu Phe Asn Val Lys Asp Gln Thr Val Met
 485 490 495
 Phe Leu Ser Arg Thr Thr Tyr Ser Leu Gln Glu Leu Gly Ala Met Gly
 500 505 510

Met Gly Asp Leu Leu Ser Ala Met Phe Asp Phe Ser Glu Lys Leu Asn
 515 520 525
 Ser Leu Ala Leu Thr Glu Glu Leu Gly Leu Phe Thr Ala Val Val
 530 535 540
 Leu Val Ser Ala Asp Arg Ser Gly Met Glu Asn Ser Ala Ser Val Glu
 545 550 555 560
 Gln Leu Gln Glu Thr Leu Leu Arg Ala Leu Arg Ala Leu Val Leu Lys
 565 570 575
 Asn Arg Pro Leu Glu Thr Ser Arg Phe Thr Lys Leu Leu Leu Lys Leu
 580 585 590
 Pro Asp Leu Arg Thr Leu Asn Asn Met His Ser Glu Lys Leu Leu Ser
 595 600 605
 Phe Arg Val Asp Ala Gln
 610

<210> 43

<211> 703

<212> PRT

<213> Homo sapiens

<400> 43

Met Ala Asp Arg Arg Arg Gln Arg Ala Ser Gln Asp Thr Glu Asp Glu
 1 5 10 15
 Glu Ser Gly Ala Ser Gly Ser Asp Ser Gly Gly Ser Pro Leu Arg Gly
 20 25 30
 Gly Gly Ser Cys Ser Gly Ser Ala Gly Gly Gly Ser Gly Ser Leu
 35 40 45
 Pro Ser Gln Arg Gly Gly Arg Thr Gly Ala Leu His Leu Arg Arg Val
 50 55 60
 Glu Ser Gly Gly Ala Lys Ser Ala Glu Glu Ser Glu Cys Glu Ser Glu
 65 70 75 80
 Asp Gly Ile Glu Gly Asp Ala Val Leu Ser Asp Tyr Glu Ser Ala Glu
 85 90 95
 Asp Ser Glu Gly Glu Gly Glu Tyr Ser Glu Glu Glu Asn Ser Lys
 100 105 110
 Val Glu Leu Lys Ser Glu Ala Asn Asp Ala Val Asn Ser Ser Thr Lys
 115 120 125
 Glu Glu Lys Gly Glu Glu Lys Pro Asp Thr Lys Ser Thr Val Thr Gly
 130 135 140
 Glu Arg Gln Ser Gly Asp Gly Gln Glu Ser Thr Glu Pro Val Glu Asn
 145 150 155 160
 Lys Val Gly Lys Lys Gly Pro Lys His Leu Asp Asp Asp Glu Asp Arg
 165 170 175
 Lys Asn Pro Ala Tyr Ile Pro Arg Lys Gly Leu Phe Phe Glu His Asp
 180 185 190
 Leu Arg Gly Gln Thr Gln Glu Glu Glu Val Arg Pro Lys Gly Arg Gln
 195 200 205
 Arg Lys Leu Trp Lys Asp Glu Gly Arg Trp Glu His Asp Lys Phe Arg
 210 215 220
 Glu Asp Glu Gln Ala Pro Lys Ser Arg Gln Glu Leu Ile Ala Leu Tyr
 225 230 235 240
 Gly Tyr Asp Ile Arg Ser Ala His Asn Pro Asp Asp Ile Lys Pro Arg
 245 250 255
 Arg Ile Arg Lys Pro Arg Tyr Gly Ser Pro Pro Gln Arg Asp Pro Asn
 260 265 270
 Trp Asn Gly Glu Arg Leu Asn Lys Ser His Arg His Gln Gly Leu Gly
 275 280 285
 Gly Thr Leu Pro Pro Arg Thr Phe Ile Asn Arg Asn Ala Ala Gly Thr
 290 295 300
 Gly Arg Met Ser Ala Pro Arg Asn Tyr Ser Arg Ser Gly Gly Phe Lys
 305 310 315 320

Glu Gly Arg Ala Gly Phe Arg Pro Val Glu Ala Gly Gly Gln His Gly
 325 330 335
 Gly Arg Ser Gly Glu Thr Val Lys His Glu Ile Ser Tyr Arg Ser Arg
 340 345 350
 Arg Leu Glu Gln Thr Ser Val Arg Asp Pro Ser Pro Glu Ala Asp Ala
 355 360 365
 Pro Val Leu Gly Ser Pro Glu Lys Glu Glu Ala Ala Ser Glu Pro Pro
 370 375 380
 Ala Ala Ala Pro Asp Ala Ala Pro Pro Pro Pro Asp Arg Pro Ile Glu
 385 390 395 400
 Lys Lys Ser Tyr Ser Arg Ala Arg Arg Thr Arg Thr Lys Val Gly Asp
 405 410 415
 Ala Val Lys Leu Ala Glu Glu Val Pro Pro Pro Glu Gly Leu Ile
 420 425 430
 Pro Ala Pro Pro Val Pro Glu Thr Thr Pro Thr Pro Pro Thr Lys Thr
 435 440 445
 Gly Thr Trp Glu Ala Pro Val Asp Ser Ser Thr Ser Gly Leu Glu Gln
 450 455 460
 Asp Val Ala Gln Leu Asn Ile Ala Glu Gln Asn Trp Ser Pro Gly Gln
 465 470 475 480
 Pro Ser Phe Leu Gln Pro Arg Glu Leu Arg Gly Met Pro Asn His Ile
 485 490 495
 His Met Gly Ala Gly Pro Pro Pro Gln Phe Asn Arg Met Glu Glu Met
 500 505 510
 Gly Val Gln Gly Gly Arg Ala Lys Arg Tyr Ser Ser Gln Arg Gln Arg
 515 520 525
 Pro Val Pro Glu Pro Pro Ala Pro Pro Val His Ile Ser Ile Met Glu
 530 535 540
 Gly His Tyr Tyr Asp Pro Leu Gln Phe Gln Gly Pro Ile Tyr Thr His
 545 550 555 560
 Gly Asp Ser Pro Ala Pro Leu Pro Pro Gln Gly Met Leu Val Gln Pro
 565 570 575
 Gly Met Asn Leu Pro His Pro Gly Leu His Pro His Gln Thr Pro Ala
 580 585 590
 Pro Leu Pro Asn Pro Gly Leu Tyr Pro Pro Pro Val Ser Met Ser Pro
 595 600 605
 Gly Gln Pro Pro Pro Gln Gln Leu Leu Ala Pro Thr Tyr Phe Ser Ala
 610 615 620
 Pro Gly Val Met Asn Phe Gly Asn Pro Ser Tyr Pro Tyr Ala Pro Gly
 625 630 635 640
 Ala Leu Pro Pro Pro Pro Pro Pro His Leu Tyr Pro Asn Thr Gln Ala
 645 650 655
 Pro Ser Gln Val Tyr Gly Gly Val Thr Tyr Tyr Asn Pro Ala Gln Gln
 660 665 670
 Gln Val Gln Pro Lys Pro Ser Pro Pro Arg Arg Thr Pro Gln Pro Val
 675 680 685
 Thr Ile Lys Pro Pro Pro Pro Glu Val Val Ser Arg Gly Ser Ser
 690 695 700

<210> 44

<211> 560

<212> PRT

<213> Homo sapiens

<400> 44

Met Pro Gln Thr Arg Ser Gln Ala Gln Ala Thr Ile Ser Phe Pro Lys
 1 5 10 15
 Arg Lys Leu Ser Arg Ala Leu Asn Lys Ala Lys Asn Ser Ser Asp Ala
 20 25 30
 Lys Leu Glu Pro Thr Asn Val Gln Thr Val Thr Cys Ser Pro Arg Val
 35 40 45

Lys Ala Leu Pro Leu Ser Pro Arg Lys Arg Leu Gly Asp Asp Asn Leu
 50 55 60
 Cys Asn Thr Pro His Leu Pro Pro Cys Ser Pro Pro Lys Gln Gly Lys
 65 70 75 80
 Lys Glu Asn Gly Pro His Ser His Thr Leu Lys Gly Arg Arg Leu
 85 90 95
 Val Phe Asp Asn Gln Leu Thr Ile Lys Ser Pro Ser Lys Arg Glu Leu
 100 105 110
 Ala Lys Val His Gln Asn Lys Ile Leu Ser Ser Val Arg Lys Ser Gln
 115 120 125
 Glu Ile Thr Thr Asn Ser Glu Gln Arg Cys Pro Leu Lys Lys Glu Ser
 130 135 140
 Ala Cys Val Arg Leu Phe Lys Gln Glu Gly Thr Cys Tyr Gln Gln Ala
 145 150 155 160
 Lys Leu Val Leu Asn Thr Ala Val Pro Asp Arg Leu Pro Ala Arg Glu
 165 170 175
 Arg Glu Met Asp Val Ile Arg Asn Phe Leu Arg Glu His Ile Cys Gly
 180 185 190
 Lys Lys Ala Gly Ser Leu Tyr Leu Ser Gly Ala Pro Gly Thr Gly Lys
 195 200 205
 Thr Ala Cys Leu Ser Arg Ile Leu Gln Asp Leu Lys Lys Glu Leu Lys
 210 215 220
 Gly Phe Lys Thr Ile Met Leu Asn Cys Met Ser Leu Arg Thr Ala Gln
 225 230 235 240
 Ala Val Phe Pro Ala Ile Ala Gln Glu Ile Cys Gln Glu Glu Val Ser
 245 250 255
 Arg Pro Ala Gly Lys Asp Met Met Arg Lys Leu Glu Lys His Met Thr
 260 265 270
 Ala Glu Lys Gly Pro Met Ile Val Leu Val Leu Asp Glu Met Asp Gln
 275 280 285
 Leu Asp Ser Lys Gly Gln Asp Val Leu Tyr Thr Leu Phe Glu Trp Pro
 290 295 300
 Trp Leu Ser Asn Ser His Leu Val Leu Ile Gly Ile Ala Asn Thr Leu
 305 310 315 320
 Asp Leu Thr Asp Arg Ile Leu Pro Arg Leu Gln Ala Arg Glu Lys Cys
 325 330 335
 Lys Pro Gln Leu Leu Asn Phe Pro Pro Tyr Thr Arg Asn Gln Ile Val
 340 345 350
 Thr Ile Leu Gln Asp Arg Leu Asn Gln Val Ser Arg Asp Gln Val Leu
 355 360 365
 Asp Asn Ala Ala Val Gln Phe Cys Ala Arg Lys Val Ser Ala Val Ser
 370 375 380
 Gly Asp Val Arg Lys Ala Leu Asp Val Cys Arg Arg Ala Ile Glu Ile
 385 390 395 400
 Val Glu Ser Asp Val Lys Ser Gln Thr Ile Leu Lys Pro Leu Ser Glu
 405 410 415
 Cys Lys Ser Pro Ser Glu Pro Leu Ile Pro Lys Arg Val Gly Leu Ile
 420 425 430
 His Ile Ser Gln Val Ile Ser Glu Val Asp Gly Asn Arg Met Thr Leu
 435 440 445
 Ser Gln Glu Gly Ala Gln Asp Ser Phe Pro Leu Gln Gln Lys Ile Leu
 450 455 460
 Val Cys Ser Leu Met Leu Leu Ile Arg Gln Leu Lys Ile Lys Glu Val
 465 470 475 480
 Thr Leu Gly Lys Leu Tyr Glu Ala Tyr Ser Lys Val Cys Arg Lys Gln
 485 490 495
 Gln Val Ala Ala Val Asp Gln Ser Glu Cys Leu Ser Leu Ser Gly Leu
 500 505 510
 Leu Glu Ala Arg Gly Ile Leu Gly Leu Lys Arg Asn Lys Glu Thr Arg
 515 520 525
 Leu Thr Lys Val Phe Phe Lys Ile Glu Glu Lys Glu Ile Glu His Ala
 530 535 540
 Leu Lys Asp Lys Ala Leu Ile Gly Asn Ile Leu Ala Thr Gly Leu Pro
 545 550 555 560
 <210> 45

<211> 462

<212> PRT

<213> Homo sapiens

<400> 45

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Met Ala Ser Asn Ser Ser Ser Cys Pro Thr Pro Gly Gly Gly His Leu
1      5      10      15
Asn Gly Tyr Pro Val Pro Pro Tyr Ala Phe Phe Phe Pro Pro Met Leu
20     25     30
Gly Gly Leu Ser Pro Pro Gly Ala Leu Thr Thr Leu Gln His Gln Leu
35     40     45
Pro Val Ser Gly Tyr Ser Thr Pro Ser Pro Ala Thr Ile Glu Thr Gln
50     55     60
Ser Ser Ser Ser Glu Glu Ile Val Pro Ser Pro Pro Ser Pro Pro Pro
65     70     75     80
Leu Pro Arg Ile Tyr Lys Pro Cys Phe Val Cys Gln Asp Lys Ser Ser
85     90     95
Gly Tyr His Tyr Gly Val Ser Ala Cys Glu Gly Cys Lys Gly Phe Phe
100    105    110
Arg Arg Ser Ile Gln Lys Asn Met Val Tyr Thr Cys His Arg Asp Lys
115    120    125
Asn Cys Ile Ile Asn Lys Val Thr Arg Asn Arg Cys Gln Tyr Cys Arg
130    135    140
Leu Gln Lys Cys Phe Glu Val Gly Met Ser Lys Glu Ser Val Arg Asn
145    150    155    160
Asp Arg Asn Lys Lys Lys Lys Glu Val Pro Lys Pro Glu Cys Ser Glu
165    170    175
Ser Tyr Thr Leu Thr Pro Glu Val Gly Glu Leu Ile Glu Lys Val Arg
180    185    190
Lys Ala His Gln Glu Thr Phe Pro Ala Leu Cys Gln Leu Gly Lys Tyr
195    200    205
Thr Thr Asn Asn Ser Ser Glu Gln Arg Val Ser Leu Asp Ile Asp Leu
210    215    220
Trp Asp Lys Phe Ser Glu Leu Ser Thr Lys Cys Ile Ile Lys Thr Val
225    230    235    240
Glu Phe Ala Lys Gln Leu Pro Gly Phe Thr Thr Leu Thr Ile Ala Asp
245    250    255
Gln Ile Thr Leu Leu Lys Ala Ala Cys Leu Asp Ile Leu Ile Leu Arg
260    265    270
Ile Cys Thr Arg Tyr Thr Pro Glu Gln Asp Thr Met Thr Phe Ser Asp
275    280    285
Gly Leu Thr Leu Asn Arg Thr Gln Met His Asn Ala Gly Phe Gly Pro
290    295    300
Leu Thr Asp Leu Val Phe Ala Phe Ala Asn Gln Leu Leu Pro Leu Glu
305    310    315    320
Met Asp Asp Ala Glu Thr Gly Leu Leu Ser Ala Ile Cys Leu Ile Cys
325    330    335
Gly Asp Arg Gln Asp Leu Glu Gln Pro Asp Arg Val Asp Met Leu Gln
340    345    350
Glu Pro Leu Leu Glu Ala Leu Lys Val Tyr Val Arg Lys Arg Arg Pro
355    360    365
Ser Arg Pro His Met Phe Pro Lys Met Leu Met Lys Ile Thr Asp Leu
370    375    380
Arg Ser Ile Ser Ala Lys Gly Ala Glu Arg Val Ile Thr Leu Lys Met
385    390    395    400
Glu Ile Pro Gly Ser Met Pro Pro Leu Ile Gln Glu Met Leu Glu Asn
405    410    415
Ser Glu Gly Leu Asp Thr Leu Ser Gly Gln Pro Gly Gly Gly Arg
420    425    430
Asp Gly Gly Gly Leu Ala Pro Pro Pro Gly Ser Cys Ser Pro Ser Leu
435    440    445

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Ser Pro Ser Ser Asn Arg Ser Ser Pro Ala Thr His Ser Pro
 450 455 460

<210> 46

<211> 1531

<212> PRT

<213> Homo sapiens

<400> 46

Met Glu Val Ser Pro Leu Gln Pro Val Asn Glu Asn Met Gln Val Asn
 1 5 10 15
 Lys Ile Lys Lys Asn Glu Asp Ala Lys Lys Arg Leu Ser Val Glu Arg
 20 25 30
 Ile Tyr Gln Lys Lys Thr Gln Leu Glu His Ile Leu Leu Arg Pro Asp
 35 40 45
 Thr Tyr Ile Gly Ser Val Glu Leu Val Thr Gln Gln Met Trp Val Tyr
 50 55 60
 Asp Glu Asp Val Gly Ile Asn Tyr Arg Glu Val Thr Phe Val Pro Gly
 65 70 75 80
 Leu Tyr Lys Ile Phe Asp Glu Ile Leu Val Asn Ala Ala Asp Asn Lys
 85 90 95
 Gln Arg Asp Pro Lys Met Ser Cys Ile Arg Val Thr Ile Asp Pro Glu
 100 105 110
 Asn Asn Leu Ile Ser Ile Trp Asn Asn Gly Lys Gly Ile Pro Val Val
 115 120 125
 Glu His Lys Val Glu Lys Met Tyr Val Pro Ala Leu Ile Phe Gly Gln
 130 135 140
 Leu Leu Thr Ser Ser Asn Tyr Asp Asp Glu Lys Lys Val Thr Gly
 145 150 155 160
 Gly Arg Asn Gly Tyr Gly Ala Lys Leu Cys Asn Ile Phe Ser Thr Lys
 165 170 175
 Phe Thr Val Glu Thr Ala Ser Arg Glu Tyr Lys Lys Met Phe Lys Gln
 180 185 190
 Thr Trp Met Asp Asn Met Gly Arg Ala Gly Glu Met Glu Leu Lys Pro
 195 200 205
 Phe Asn Gly Glu Asp Tyr Thr Cys Ile Thr Phe Gln Pro Asp Leu Ser
 210 215 220
 Lys Phe Lys Met Gln Ser Leu Asp Lys Asp Ile Val Ala Leu Met Val
 225 230 235 240
 Arg Arg Ala Tyr Asp Ile Ala Gly Ser Thr Lys Asp Val Lys Val Phe
 245 250 255
 Leu Asn Gly Asn Lys Leu Pro Val Lys Gly Phe Arg Ser Tyr Val Asp
 260 265 270
 Met Tyr Leu Lys Asp Lys Leu Asp Glu Thr Gly Asn Ser Leu Lys Val
 275 280 285
 Ile His Glu Gln Val Asn His Arg Trp Glu Val Cys Leu Thr Met Ser
 290 295 300
 Glu Lys Gly Phe Gln Gln Ile Ser Phe Val Asn Ser Ile Ala Thr Ser
 305 310 315 320
 Lys Gly Gly Arg His Val Asp Tyr Val Ala Asp Gln Ile Val Thr Lys
 325 330 335
 Leu Val Asp Val Val Lys Lys Lys Asn Lys Gly Gly Val Ala Val Lys
 340 345 350
 Ala His Gln Val Lys Asn His Met Trp Ile Phe Val Asn Ala Leu Ile
 355 360 365
 Glu Asn Pro Thr Phe Asp Ser Gln Thr Lys Glu Asn Met Thr Leu Gln
 370 375 380
 Pro Lys Ser Phe Gly Ser Thr Cys Gln Leu Ser Glu Lys Phe Ile Lys
 385 390 395 400
 Ala Ala Ile Gly Cys Gly Ile Val Glu Ser Ile Leu Asn Trp Val Lys
 405 410 415

Phe Lys Ala Gln Val Gln Leu Asn Lys Lys Cys Ser Ala Val Lys His
 420 425 430
 Asn Arg Ile Lys Gly Ile Pro Lys Leu Asp Asp Ala Asn Asp Ala Gly
 435 440 445
 Gly Arg Asn Ser Thr Glu Cys Thr Leu Ile Leu Thr Glu Gly Asp Ser
 450 455 460
 Ala Lys Thr Leu Ala Val Ser Gly Leu Gly Val Val Gly Arg Asp Lys
 465 470 475 480
 Tyr Gly Val Phe Pro Leu Arg Gly Lys Ile Leu Asn Val Arg Glu Ala
 485 490 495
 Ser His Lys Gln Ile Met Glu Asn Ala Glu Ile Asn Asn Ile Ile Lys
 500 505 510
 Ile Val Gly Leu Gln Tyr Lys Lys Asn Tyr Glu Asp Glu Asp Ser Leu
 515 520 525
 Lys Thr Leu Arg Tyr Gly Lys Ile Met Ile Met Thr Asp Gln Asp Gln
 530 535 540
 Asp Gly Ser His Ile Lys Gly Leu Leu Ile Asn Phe Ile His His Asn
 545 550 555 560
 Trp Pro Ser Leu Leu Arg His Arg Phe Leu Glu Glu Phe Ile Thr Pro
 565 570 575
 Ile Val Lys Val Ser Lys Asn Lys Gln Glu Met Ala Phe Tyr Ser Leu
 580 585 590
 Pro Glu Phe Glu Glu Trp Lys Ser Ser Thr Pro Asn His Lys Lys Trp
 595 600 605
 Lys Val Lys Tyr Tyr Lys Gly Leu Gly Thr Ser Thr Ser Lys Glu Ala
 610 615 620
 Lys Glu Tyr Phe Ala Asp Met Lys Arg His Arg Ile Gln Phe Lys Tyr
 625 630 635 640
 Ser Gly Pro Glu Asp Asp Ala Ala Ile Ser Leu Ala Phe Ser Lys Lys
 645 650 655
 Gln Ile Asp Asp Arg Lys Glu Trp Leu Thr Asn Phe Met Glu Asp Arg
 660 665 670
 Arg Gln Arg Lys Leu Leu Gly Leu Pro Glu Asp Tyr Leu Tyr Gly Gln
 675 680 685
 Thr Thr Thr Tyr Leu Thr Tyr Asn Asp Phe Ile Asn Lys Glu Leu Ile
 690 695 700
 Leu Phe Ser Asn Ser Asp Asn Glu Arg Ser Ile Pro Ser Met Val Asp
 705 710 715 720
 Gly Leu Lys Pro Gly Gln Arg Lys Val Leu Phe Thr Cys Phe Lys Arg
 725 730 735
 Asn Asp Lys Arg Glu Val Lys Val Ala Gln Leu Ala Gly Ser Val Ala
 740 745 750
 Glu Met Ser Ser Tyr His His Gly Glu Met Ser Leu Met Met Thr Ile
 755 760 765
 Ile Asn Leu Ala Gln Asn Phe Val Gly Ser Asn Asn Leu Asn Leu Leu
 770 775 780
 Gln Pro Ile Gly Gln Phe Gly Thr Arg Leu His Gly Gly Lys Asp Ser
 785 790 795 800
 Ala Ser Pro Arg Tyr Ile Phe Thr Met Leu Ser Ser Leu Ala Arg Leu
 805 810 815
 Leu Phe Pro Pro Lys Asp Asp His Thr Leu Lys Phe Leu Tyr Asp Asp
 820 825 830
 Asn Gln Arg Val Glu Pro Glu Trp Tyr Ile Pro Ile Ile Pro Met Val
 835 840 845
 Leu Ile Asn Gly Ala Glu Gly Ile Gly Thr Gly Trp Ser Cys Lys Ile
 850 855 860
 Pro Asn Phe Asp Val Arg Glu Ile Val Asn Asn Ile Arg Arg Leu Met
 865 870 875 880
 Asp Gly Glu Glu Pro Leu Pro Met Leu Pro Ser Tyr Lys Asn Phe Lys
 885 890 895
 Gly Thr Ile Glu Glu Leu Ala Pro Asn Gln Tyr Val Ile Ser Gly Glu
 900 905 910
 Val Ala Ile Leu Asn Ser Thr Thr Ile Glu Ile Ser Glu Leu Pro Val
 915 920 925
 Arg Thr Trp Thr Gln Thr Tyr Lys Glu Gln Val Leu Glu Pro Met Leu
 930 935 940

Asn	Gly	Thr	Glu	Lys	Thr	Pro	Pro	Leu	Ile	Thr	Asp	Tyr	Arg	Glu	Tyr	945	950	955	960
His	Thr	Asp	Thr	Thr	Val	Lys	Phe	Val	Val	Lys	Met	Thr	Glu	Glu	Lys	965	970	975	
Leu	Ala	Glu	Ala	Glu	Arg	Val	Gly	Leu	His	Lys	Val	Phe	Lys	Leu	Gln	980	985	990	
Thr	Ser	Leu	Thr	Cys	Asn	Ser	Met	Val	Leu	Phe	Asp	His	Val	Gly	Cys	995	1000	1005	
Leu	Lys	Lys	Tyr	Asp	Thr	Val	Leu	Asp	Ile	Leu	Arg	Asp	Phe	Phe		1010	1015	1020	
Glu	Leu	Arg	Leu	Lys	Tyr	Tyr	Gly	Leu	Arg	Lys	Glu	Trp	Leu	Leu		1025	1030	1035	
Gly	Met	Leu	Gly	Ala	Glu	Ser	Ala	Lys	Leu	Asn	Asn	Gln	Ala	Arg		1040	1045	1050	
Phe	Ile	Leu	Glu	Lys	Ile	Asp	Gly	Lys	Ile	Ile	Ile	Glu	Asn	Lys		1055	1060	1065	
Pro	Lys	Lys	Glu	Leu	Ile	Lys	Val	Leu	Ile	Gln	Arg	Gly	Tyr	Asp		1070	1075	1080	
Ser	Asp	Pro	Val	Lys	Ala	Trp	Lys	Glu	Ala	Gln	Gln	Lys	Val	Pro		1085	1090	1095	
Asp	Glu	Glu	Glu	Asn	Glu	Glu	Ser	Asp	Asn	Glu	Lys	Glu	Thr	Glu		1100	1105	1110	
Lys	Ser	Asp	Ser	Val	Thr	Asp	Ser	Gly	Pro	Thr	Phe	Asn	Tyr	Leu		1115	1120	1125	
Leu	Asp	Met	Pro	Leu	Trp	Tyr	Leu	Thr	Lys	Glu	Lys	Lys	Asp	Glu		1130	1135	1140	
Leu	Cys	Arg	Leu	Arg	Asn	Glu	Lys	Glu	Gln	Glu	Leu	Asp	Thr	Leu		1145	1150	1155	
Lys	Arg	Lys	Ser	Pro	Ser	Asp	Leu	Trp	Lys	Glu	Asp	Leu	Ala	Thr		1160	1165	1170	
Phe	Ile	Glu	Glu	Leu	Glu	Ala	Val	Glu	Ala	Lys	Glu	Lys	Gln	Asp		1175	1180	1185	
Glu	Gln	Val	Gly	Leu	Pro	Gly	Lys	Gly	Gly	Lys	Ala	Lys	Gly	Lys		1190	1195	1200	
Lys	Thr	Gln	Met	Ala	Glu	Val	Leu	Pro	Ser	Pro	Arg	Gly	Gln	Arg		1205	1210	1215	
Val	Ile	Pro	Arg	Ile	Thr	Ile	Glu	Met	Lys	Ala	Glu	Ala	Glu	Lys		1220	1225	1230	
Lys	Asn	Lys	Lys	Lys	Ile	Lys	Asn	Glu	Asn	Thr	Glu	Gly	Ser	Pro		1235	1240	1245	
Gln	Glu	Asp	Gly	Val	Glu	Leu	Glu	Gly	Leu	Lys	Gln	Arg	Leu	Glu		1250	1255	1260	
Lys	Lys	Gln	Lys	Arg	Glu	Pro	Gly	Thr	Lys	Thr	Lys	Lys	Gln	Thr		1265	1270	1275	
Thr	Leu	Ala	Phe	Lys	Pro	Ile	Lys	Lys	Gly	Lys	Lys	Arg	Asn	Pro		1280	1285	1290	
Trp	Ser	Asp	Ser	Glu	Ser	Asp	Arg	Ser	Ser	Asp	Glu	Ser	Asn	Phe		1295	1300	1305	
Asp	Val	Pro	Pro	Arg	Glu	Thr	Glu	Pro	Arg	Arg	Ala	Ala	Thr	Lys		1310	1315	1320	
Thr	Lys	Phe	Thr	Met	Asp	Leu	Asp	Ser	Asp	Glu	Asp	Phe	Ser	Asp		1325	1330	1335	
Phe	Asp	Glu	Lys	Thr	Asp	Asp	Glu	Asp	Phe	Val	Pro	Ser	Asp	Ala		1340	1345	1350	
Ser	Pro	Pro	Lys	Thr	Lys	Thr	Ser	Pro	Lys	Leu	Ser	Asn	Lys	Glu		1355	1360	1365	
Leu	Lys	Pro	Gln	Lys	Ser	Val	Val	Ser	Asp	Leu	Glu	Ala	Asp	Asp		1370	1375	1380	
Val	Lys	Gly	Ser	Val	Pro	Leu	Ser	Ser	Ser	Pro	Pro	Ala	Thr	His		1385	1390	1395	
Phe	Pro	Asp	Glu	Thr	Glu	Ile	Thr	Asn	Pro	Val	Pro	Lys	Lys	Asn		1400	1405	1410	
Val	Thr	Val	Lys	Lys	Thr	Ala	Ala	Lys	Ser	Gln	Ser	Ser	Thr	Ser		1415	1420	1425	
Thr	Thr	Gly	Ala	Lys	Lys	Arg	Ala	Ala	Pro	Lys	Gly	Thr	Lys	Arg		1430	1435	1440	

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Asp Pro  Ala Leu Asn Ser Gly  Val Ser Gln Lys Pro  Asp Pro Ala
1445                1450                1455
Lys Thr  Lys Asn Arg Arg Lys  Arg Lys Pro Ser  Thr  Ser Asp Asp
1460                1465                1470
Ser Asp  Ser Asn Phe Glu Lys  Ile Val Ser Lys Ala  Val Thr Ser
1475                1480                1485
Lys Lys  Ser Lys Gly Glu Ser  Asp Asp Phe His Met  Asp Phe Asp
1490                1495                1500
Ser Ala  Val Ala Pro Arg Ala  Lys Ser Val Arg Ala  Lys Lys Pro
1505                1510                1515
Ile Lys  Tyr Leu Glu Glu Ser  Asp Glu Asp Asp Leu  Phe
1520                1525                1530

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<210> 47

<211> 258

<212> PRT

<213> Homo sapiens

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<400> 47
Met Leu Pro Leu Cys Leu Val Ala Ala Leu Leu Leu Ala Ala Gly Pro
1      5      10      15
Gly Pro Ser Leu Gly Asp Glu Ala Ile His Cys Pro Pro Cys Ser Glu
20     25     30
Glu Lys Leu Ala Arg Cys Arg Pro Val Gly Cys Glu Glu Leu Val
35     40     45
Arg Glu Pro Gly Cys Gly Cys Ala Thr Cys Ala Leu Gly Leu Gly
50     55     60
Met Pro Cys Gly Val Tyr Thr Pro Arg Cys Gly Ser Gly Leu Arg Cys
65     70     75     80
Tyr Pro Pro Arg Gly Val Glu Lys Pro Leu His Thr Leu Met His Gly
85     90     95
Gln Gly Val Cys Met Glu Leu Ala Glu Ile Glu Ala Ile Gln Glu Ser
100    105    110
Leu Gln Pro Ser Asp Lys Asp Glu Gly Asp His Pro Asn Asn Ser Phe
115    120    125
Ser Pro Cys Ser Ala His Asp Arg Arg Cys Leu Gln Lys His Phe Ala
130    135    140
Lys Ile Arg Asp Arg Ser Thr Ser Gly Gly Lys Met Lys Val Asn Gly
145    150    155    160
Ala Pro Arg Glu Asp Ala Arg Pro Val Pro Gln Gly Ser Cys Gln Ser
165    170    175
Glu Leu His Arg Ala Leu Glu Arg Leu Ala Ala Ser Gln Ser Arg Thr
180    185    190
His Glu Asp Leu Tyr Ile Ile Pro Ile Pro Asn Cys Asp Arg Asn Gly
195    200    205
Asn Phe His Pro Lys Gln Cys His Pro Ala Leu Asp Gly Gln Arg Gly
210    215    220
Lys Cys Trp Cys Val Asp Arg Lys Thr Gly Val Lys Leu Pro Gly Gly
225    230    235    240
Leu Glu Pro Lys Gly Glu Leu Asp Cys His Gln Leu Ala Asp Ser Phe
245    250    255
Arg Glu

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<210> 48

<211> 378

<212> PRT

<213> Homo sapiens

<400> 48

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Met Asp Leu Gly Lys Pro Met Lys Ser Val Leu Val Val Ala Leu Leu
1      5      10      15
Val Ile Phe Gln Val Cys Leu Cys Gln Asp Glu Val Thr Asp Asp Tyr
20      25      30
Ile Gly Asp Asn Thr Thr Val Asp Tyr Thr Leu Phe Glu Ser Leu Cys
35      40      45
Ser Lys Lys Asp Val Arg Asn Phe Lys Ala Trp Phe Leu Pro Ile Met
50      55      60
Tyr Ser Ile Ile Cys Phe Val Gly Leu Leu Gly Asn Gly Leu Val Val
65      70      75      80
Leu Thr Tyr Ile Tyr Phe Lys Arg Leu Lys Thr Met Thr Asp Thr Tyr
85      90      95
Leu Leu Asn Leu Ala Val Ala Asp Ile Leu Phe Leu Leu Thr Leu Pro
100     105     110
Phe Trp Ala Tyr Ser Ala Ala Lys Ser Trp Val Phe Gly Val His Phe
115     120     125
Cys Lys Leu Ile Phe Ala Ile Tyr Lys Met Ser Phe Ser Gly Met
130     135     140
Leu Leu Leu Leu Cys Ile Ser Ile Asp Arg Tyr Val Ala Ile Val Gln
145     150     155     160
Ala Val Ser Ala His Arg His Arg Ala Arg Val Leu Leu Ile Ser Lys
165     170     175
Leu Ser Cys Val Gly Ile Trp Ile Leu Ala Thr Val Leu Ser Ile Pro
180     185     190
Glu Leu Leu Tyr Ser Asp Leu Gln Arg Ser Ser Ser Glu Gln Ala Met
195     200     205
Arg Cys Ser Leu Ile Thr Glu His Val Glu Ala Phe Ile Thr Ile Gln
210     215     220
Val Ala Gln Met Val Ile Gly Phe Leu Val Pro Leu Leu Ala Met Ser
225     230     235     240
Phe Cys Tyr Leu Val Ile Ile Arg Thr Leu Leu Gln Ala Arg Asn Phe
245     250     255
Glu Arg Asn Lys Ala Ile Lys Val Ile Ile Ala Val Val Val Phe
260     265     270
Ile Val Phe Gln Leu Pro Tyr Asn Gly Val Val Leu Ala Gln Thr Val
275     280     285
Ala Asn Phe Asn Ile Thr Ser Ser Thr Cys Glu Leu Ser Lys Gln Leu
290     295     300
Asn Ile Ala Tyr Asp Val Thr Tyr Ser Leu Ala Cys Val Arg Cys Cys
305     310     315     320
Val Asn Pro Phe Leu Tyr Ala Phe Ile Gly Val Lys Phe Arg Asn Asp
325     330     335
Leu Phe Lys Leu Phe Lys Asp Leu Gly Cys Leu Ser Gln Glu Gln Leu
340     345     350
Arg Gln Trp Ser Ser Cys Arg His Ile Arg Arg Ser Ser Met Ser Val
355     360     365
Glu Ala Glu Thr Thr Thr Thr Phe Ser Pro
370     375

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<210> 49

<211> 411

<212> PRT

<213> Homo sapiens

<400> 49

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Met Ser Lys Arg Pro Ser Tyr Ala Pro Pro Pro Thr Pro Ala Pro Ala
1      5      10      15
Thr Gln Met Pro Ser Thr Pro Gly Phe Val Gly Tyr Asn Pro Tyr Ser
20      25      30

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<213> Homo sapiens

Met	Ser	Val	Arg	Tyr	Ser	Ser	Ser	Lys	His	Tyr	Ser	Ser	Ser	Arg	Ser
1				5					10					15	
Gly	Gly	Gly	Gly	Gly	Gly	Gly	Gly	Cys	Gly	Gly	Gly	Gly	Gly	Val	Ser
			20					25					30		
Ser	Leu	Arg	Ile	Ser	Ser	Ser	Lys	Gly	Ser	Leu	Gly	Gly	Gly	Phe	Ser
	35						40				45				

Ser Gly Gly Phe Ser Gly Gly Ser Phe Ser Arg Gly Ser Ser Gly Gly
 50 55 60
 Gly Cys Phe Gly Gly Ser Ser Gly Gly Tyr Gly Gly Leu Gly Gly Phe
 65 70 75 80
 Gly Gly Gly Ser Phe His Gly Ser Tyr Gly Ser Ser Ser Phe Gly Gly
 85 90 95
 Ser Tyr Gly Gly Ser Phe Gly Gly Gly Asn Phe Gly Gly Gly Ser Phe
 100 105 110
 Gly Gly Gly Ser Phe Gly Gly Gly Gly Phe Gly Gly Gly Phe Gly
 115 120 125
 Gly Gly Phe Gly Gly Gly Phe Gly Gly Asp Gly Gly Leu Leu Ser Gly
 130 135 140
 Asn Glu Lys Val Thr Met Gln Asn Leu Asn Asp Arg Leu Ala Ser Tyr
 145 150 155 160
 Leu Asp Lys Val Arg Ala Leu Glu Glu Ser Asn Tyr Glu Leu Glu Gly
 165 170 175
 Lys Ile Lys Glu Trp Tyr Glu Lys His Gly Asn Ser His Gln Gly Glu
 180 185 190
 Pro Arg Asp Tyr Ser Lys Tyr Tyr Lys Thr Ile Asp Asp Leu Lys Asn
 195 200 205
 Gln Ile Leu Asn Leu Thr Thr Asp Asn Ala Asn Ile Leu Leu Gln Ile
 210 215 220
 Asp Asn Ala Arg Leu Ala Ala Asp Asp Phe Arg Leu Lys Tyr Glu Asn
 225 230 235 240
 Glu Val Ala Leu Arg Gln Ser Val Glu Ala Asp Ile Asn Gly Leu Arg
 245 250 255
 Arg Val Leu Asp Glu Leu Thr Leu Thr Lys Ala Asp Leu Glu Met Gln
 260 265 270
 Ile Glu Ser Leu Thr Glu Glu Leu Ala Tyr Leu Lys Lys Asn His Glu
 275 280 285
 Glu Glu Met Lys Asp Leu Arg Asn Val Ser Thr Gly Asp Val Asn Val
 290 295 300
 Glu Met Asn Ala Ala Pro Gly Val Asp Leu Thr Gln Leu Leu Asn Asn
 305 310 315 320
 Met Arg Ser Gln Tyr Glu Gln Leu Ala Glu Gln Asn Arg Lys Asp Ala
 325 330 335
 Glu Ala Trp Phe Asn Glu Lys Ser Lys Glu Leu Thr Thr Glu Ile Asp
 340 345 350
 Asn Asn Ile Glu Gln Ile Ser Ser Tyr Lys Ser Glu Ile Thr Glu Leu
 355 360 365
 Arg Arg Asn Val Gln Ala Leu Glu Ile Glu Leu Gln Ser Gln Leu Ala
 370 375 380
 Leu Lys Gln Ser Leu Glu Ala Ser Leu Ala Glu Thr Glu Gly Arg Tyr
 385 390 395 400
 Cys Val Gln Leu Ser Gln Ile His Ala Gln Ile Ser Ala Leu Glu Glu
 405 410 415
 Gln Leu Gln Gln Ile Arg Ala Glu Thr Glu Cys Gln Asn Thr Glu Tyr
 420 425 430
 Gln Gln Leu Leu Asp Ile Lys Ile Arg Leu Glu Asn Glu Ile Gln Thr
 435 440 445
 Tyr Arg Ser Leu Leu Glu Gly Glu Gly Ser Ser Gly Gly Gly Gly Arg
 450 455 460
 Gly Gly Gly Ser Phe Gly Gly Gly Tyr Gly Gly Gly Ser Ser Gly Gly
 465 470 475 480
 Gly Ser Ser Gly Gly Gly Tyr Gly Gly Gly His Gly Gly Ser Ser Gly
 485 490 495
 Gly Gly Tyr Gly Gly Gly Ser Ser Gly Gly Gly Ser Ser Gly Gly Gly
 500 505 510
 Tyr Gly Gly Gly Ser Ser Ser Gly Gly His Gly Gly Gly Ser Ser Ser
 515 520 525
 Gly Gly His Gly Gly Ser Ser Ser Gly Gly Tyr Gly Gly Gly Ser Ser
 530 535 540
 Gly Gly Gly Gly Gly Gly Tyr Gly Gly Gly Ser Ser Gly Gly Gly Ser
 545 550 555 560
 Ser Ser Gly Gly Gly Tyr Gly Gly Gly Ser Ser Gly Gly His Lys
 565 570 575

Ser Ser Ser Ser Gly Ser Val Gly Glu Ser Ser Ser Lys Gly Pro Arg
 580 585 590
 Tyr

<210> 51

<211> 494

<212> PRT

<213> Homo sapiens

<400> 51

Met Asp Leu Ser Asn Asn Thr Met Ser Leu Ser Val Arg Thr Pro Gly
 1 5 10 15
 Leu Ser Arg Arg Leu Ser Ser Gln Ser Val Ile Gly Arg Pro Arg Gly
 20 25 30
 Met Ser Ala Ser Ser Val Gly Ser Gly Tyr Gly Gly Ser Ala Phe Gly
 35 40 45
 Phe Gly Ala Ser Cys Gly Gly Gly Phe Ser Ala Ala Ser Met Phe Gly
 50 55 60
 Ser Ser Ser Gly Phe Gly Gly Gly Ser Gly Ser Ser Met Ala Gly Gly
 65 70 75 80
 Leu Gly Ala Gly Tyr Gly Arg Ala Leu Gly Gly Gly Ser Phe Gly Gly
 85 90 95
 Leu Gly Met Gly Phe Gly Gly Ser Pro Gly Gly Gly Ser Leu Gly Ile
 100 105 110
 Leu Ser Gly Asn Asp Gly Gly Leu Leu Ser Gly Ser Glu Lys Glu Thr
 115 120 125
 Met Gln Asn Leu Asn Asp Arg Leu Ala Ser Tyr Leu Asp Lys Val Arg
 130 135 140
 Ala Leu Glu Glu Ala Asn Thr Glu Leu Glu Asn Lys Ile Arg Glu Trp
 145 150 155 160
 Tyr Glu Thr Arg Gly Thr Gly Thr Ala Asp Ala Ser Gln Ser Asp Tyr
 165 170 175
 Ser Lys Tyr Tyr Pro Leu Ile Glu Asp Leu Arg Asn Lys Ile Ile Ser
 180 185 190
 Ala Ser Ile Gly Asn Ala Gln Leu Leu Gln Ile Asp Asn Ala Arg
 195 200 205
 Leu Ala Ala Glu Asp Phe Arg Met Lys Tyr Glu Asn Glu Leu Ala Leu
 210 215 220
 Arg Gln Gly Val Glu Ala Asp Ile Asn Gly Leu Arg Arg Val Leu Asp
 225 230 235 240
 Glu Leu Thr Leu Thr Arg Thr Asp Leu Glu Met Gln Ile Glu Ser Leu
 245 250 255
 Asn Glu Glu Leu Ala Tyr Met Lys Lys Asn His Glu Asp Glu Leu Gln
 260 265 270
 Ser Phe Arg Val Gly Gly Pro Gly Glu Val Ser Val Glu Met Asp Ala
 275 280 285
 Ala Pro Gly Val Asp Leu Thr Arg Leu Leu Asn Asp Met Arg Ala Gln
 290 295 300
 Tyr Glu Thr Ile Ala Glu Gln Asn Arg Lys Asp Ala Glu Ala Trp Phe
 305 310 315 320
 Ile Glu Lys Ser Gly Glu Leu Arg Lys Glu Ile Ser Thr Asn Thr Glu
 325 330 335
 Gln Leu Gln Ser Ser Lys Ser Glu Val Thr Asp Leu Arg Arg Ala Phe
 340 345 350
 Gln Asn Leu Glu Ile Glu Leu Gln Ser Gln Leu Ala Met Lys Lys Ser
 355 360 365
 Leu Glu Asp Ser Leu Ala Glu Ala Glu Gly Asp Tyr Cys Ala Gln Leu
 370 375 380
 Ser Gln Val Gln Gln Leu Ile Ser Asn Leu Glu Ala Gln Leu Leu Gln
 385 390 395 400

Val Arg Ala Asp Ala Glu Arg Gln Asn Val Asp His Gln Arg Leu Leu
 405 410 415
 Asn Val Lys Ala Arg Leu Glu Leu Glu Ile Glu Thr Tyr Arg Arg Leu
 420 425 430
 Leu Asp Gly Glu Ala Gln Gly Asp Gly Leu Glu Glu Ser Leu Phe Val
 435 440 445
 Thr Asp Ser Lys Ser Gln Ala Gln Ser Thr Asp Ser Ser Lys Asp Pro
 450 455 460
 Thr Lys Thr Arg Lys Ile Lys Thr Val Val Gln Glu Met Val Asn Gly
 465 470 475 480
 Glu Val Val Ser Ser Gln Val Gln Glu Ile Glu Glu Leu Met
 485 490

<210> 52

<211> 361

<212> PRT

<213> Homo sapiens

<400> 52

Cys Asn Trp Phe Cys Glu Gly Ser Phe Asn Gly Ser Glu Lys Glu Thr
 1 5 10 15
 Met Gln Phe Leu Asn Asp Arg Leu Ala Ser Tyr Leu Glu Lys Val Arg
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<213> Homo sapiens

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<211> 2341

<212> DNA

<213> Homo sapiens

<400> 66

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<211> 2109

<212> DNA

<213> Homo sapiens

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<211> 2423

<212> DNA

<213> Homo sapiens

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<210> 69

<211> 1841

<212> DNA

<213> Homo sapiens

<400> 69

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<212> DNA

<213> Homo sapiens

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<211> 795

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<212> DNA

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<213> Homo sapiens

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<211> 2356

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<212> DNA

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<213> Homo sapiens

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      245      250      255
Glu Ser Pro Pro Ser Ile Leu Thr Pro Pro Val Val Pro Thr Ala Asp
      260      265      270
Lys Val Ser Ser Ser Ala Ser Ser Ser Ser His His Glu Ala Ser Thr
      275      280      285
Gln Glu Thr Ser Glu Ser Ser Arg Glu Ser Lys Gly Lys Lys Ser Ser
      290      295      300
Ser His Ser Leu Ser His Lys Gly Lys Lys Leu Ser Ser Gly Lys Gly
      305      310      315      320
Val Ser Ser Phe Thr Ser Ala Ser Ser Ser Ser Ser Ser Ser Ser
      325      330      335

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Ser Ser Gly Gly Pro Phe Gln Pro Ala Val Ser Ser Leu Gln Ser Ser
 340 345 350
 Pro Asp Phe Ser Ala Phe Pro Lys Leu Glu Gln Pro Glu Glu Asp Lys
 355 360 365
 Tyr Ser Lys Pro Thr Ala Pro Ala Pro Ser Ala Pro Pro Ser Pro Ser
 370 375 380
 Ala Pro Glu Pro Pro Lys Ala Asp Leu Phe Glu Gln Lys Val Val Phe
 385 390 395 400
 Ser Gly Phe Gly Pro Ile Met Arg Phe Ser Thr Thr Thr Ser Ser Ser
 405 410 415
 Gly Arg Ala Arg Ala Pro Ser Pro Gly Asp Tyr Lys Ser Pro His Val
 420 425 430
 Thr Gly Ser Gly Ala Ser Ala Gly Thr His Lys Arg Met Pro Ala Leu
 435 440 445
 Ser Ala Thr Pro Val Pro Ala Asp Glu Thr Pro Glu Thr Gly Leu Lys
 450 455 460
 Glu Lys Lys His Lys Ala Ser Lys Arg Ser Arg His Gly Pro Gly Arg
 465 470 475 480
 Pro Lys Gly Ser Arg Asn Lys Glu Gly Thr Gly Gly Pro Ala Ala Pro
 485 490 495
 Ser Leu Pro Ser Ala Gln Leu Ala Gly Phe Thr Ala Thr Ala Ala Ser
 500 505 510
 Pro Phe Ser Gly Gly Ser Leu Val Ser Ser Gly Leu Gly Gly Leu Ser
 515 520 525
 Ser Arg Thr Phe Gly Pro Ser Gly Ser Leu Pro Ser Leu Ser Leu Glu
 530 535 540
 Ser Pro Leu Leu Gly Ala Gly Ile Tyr Thr Ser Asn Lys Asp Pro Ile
 545 550 555 560
 Ser His Ser Gly Gly Met Leu Arg Ala Val Cys Ser Thr Pro Leu Ser
 565 570 575
 Ser Ser Leu Leu Gly Pro Pro Gly Thr Ser Ala Leu Pro Arg Leu Ser
 580 585 590
 Arg Ser Pro Phe Thr Ser Thr Leu Pro Ser Ser Ser Ala Ser Ile Ser
 595 600 605
 Thr Thr Gln Val Phe Ser Leu Ala Gly Ser Thr Phe Ser Leu Pro Ser
 610 615 620
 Thr His Ile Phe Gly Thr Pro Met Gly Ala Val Asn Pro Leu Leu Ser
 625 630 635 640
 Gln Ala Glu Ser Ser His Thr Glu Pro Asp Leu Glu Asp Cys Ser Phe
 645 650 655
 Arg Cys Arg Gly Thr Ser Pro Gln Glu Ser Leu Ser Ser Met Ser Pro
 660 665 670
 Ile Ser Ser Leu Pro Ala Leu Phe Asp Gln Thr Ala Ser Ala Pro Cys
 675 680 685
 Gly Gly Gly Gln Leu Asp Pro Ala Ala Pro Gly Thr Thr Asn Met Glu
 690 695 700
 Gln Leu Leu Glu Lys Gln Gly Asp Gly Glu Ala Gly Val Asn Ile Val
 705 710 715 720
 Glu Met Leu Lys Ala Leu His Ala Leu Gln Lys Glu Asn Gln Arg Leu
 725 730 735
 Gln Glu Gln Ile Leu Ser Leu Thr Ala Lys Lys Glu Arg Leu Gln Ile
 740 745 750
 Leu Asn Val Gln Leu Ser Val Pro Phe Pro Ala Leu Pro Ala Ala Leu
 755 760 765
 Pro Ala Ala Asn Gly Pro Val Pro Gly Pro Tyr Gly Leu Pro Pro Gln
 770 775 780
 Ala Gly Ser Ser Asp Ser Leu Ser Thr Ser Lys Ser Pro Pro Gly Lys
 785 790 795 800
 Ser Ser Leu Gly Leu Asp Asn Ser Leu Ser Thr Ser Ser Glu Asp Pro
 805 810 815
 His Ser Gly Cys Pro Ser Arg Ser Ser Ser Ser Leu Ser Phe His Ser
 820 825 830
 Thr Pro Pro Pro Leu Pro Leu Leu Gln Gln Ser Pro Ala Thr Leu Pro
 835 840 845
 Leu Ala Leu Pro Gly Ala Pro Ala Pro Leu Pro Pro Gln Pro Gln Asn
 850 855 860

Gly Leu Gly Arg Ala Pro Gly Ala Ala Gly Leu Gly Ala Met Pro Met
 865 870 875 880
 Ala Glu Gly Leu Leu Gly Gly Leu Ala Gly Ser Gly Gly Leu Pro Leu
 885 890 895
 Asn Gly Leu Leu Gly Gly Leu Asn Gly Ala Ala Ala Pro Asn Pro Ala
 900 905 910
 Ser Leu Ser Gln Ala Gly Gly Ala Pro Thr Leu Gln Leu Pro Gly Cys
 915 920 925
 Leu Asn Ser Leu Thr Glu Gln Arg His Leu Leu Gln Gln Gln Glu
 930 935 940
 Gln Gln Leu Gln Gln Leu Gln Gln Leu Leu Ala Ser Pro Gln Leu Thr
 945 950 955 960
 Pro Glu His Gln Thr Val Val Tyr Gln Met Ile Gln Gln Ile Gln Gln
 965 970 975
 Lys Arg Glu Leu Gln Arg Leu Gln Met Ala Gly Gly Ser Gln Leu Pro
 980 985 990
 Met Ala Ser Leu Leu Ala Gly Ser Ser Thr Pro Leu Leu Ser Ala Gly
 995 1000 1005
 Thr Pro Gly Leu Leu Pro Thr Ala Ser Ala Pro Pro Leu Leu Pro
 1010 1015 1020
 Ala Gly Ala Leu Val Ala Pro Ser Leu Gly Asn Asn Thr Ser Leu
 1025 1030 1035
 Met Ala Ala Ala Ala Ala Ala Ala Ala Val Ala Ala Gly Gly
 1040 1045 1050
 Pro Pro Val Leu Thr Ala Gln Thr Asn Pro Phe Leu Ser Leu Ser
 1055 1060 1065
 Gly Ala Glu Gly Ser Gly Gly Gly Pro Lys Gly Gly Thr Ala Asp
 1070 1075 1080
 Lys Gly Ala Ser Ala Asn Gln Glu Lys Gly
 1085 1090
 <210> 77
 <211> 344
 <212> PRT
 <213> Homo sapiens

<400> 77
 Met His Arg Thr Thr Arg Ile Lys Ile Thr Glu Leu Asn Pro His Leu
 1 5 10 15
 Met Cys Ala Leu Cys Gly Gly Tyr Phe Ile Asp Ala Thr Thr Ile Val
 20 25 30
 Glu Cys Leu His Ser Phe Cys Lys Thr Cys Ile Val Arg Tyr Leu Glu
 35 40 45
 Thr Asn Lys Tyr Cys Pro Met Cys Asp Val Gln Val His Lys Thr Arg
 50 55 60
 Pro Leu Leu Ser Ile Arg Ser Asp Lys Thr Leu Gln Asp Ile Val Tyr
 65 70 75 80
 Lys Leu Val Pro Gly Leu Phe Lys Asp Glu Met Lys Arg Arg Arg Asp
 85 90 95
 Phe Tyr Ala Ala Tyr Pro Leu Thr Glu Val Pro Asn Gly Ser Asn Glu
 100 105 110
 Asp Arg Gly Glu Val Leu Glu Gln Glu Lys Gly Ala Leu Ser Asp Asp
 115 120 125
 Glu Ile Val Ser Leu Ser Ile Glu Phe Tyr Glu Gly Ala Arg Asp Arg
 130 135 140
 Asp Glu Lys Lys Gly Pro Leu Glu Asn Gly Asp Gly Asp Lys Glu Lys
 145 150 155 160
 Thr Gly Val Arg Phe Leu Arg Cys Pro Ala Ala Met Thr Val Met His
 165 170 175
 Leu Ala Lys Phe Leu Arg Asn Lys Met Asp Val Pro Ser Lys Tyr Lys
 180 185 190

Val Glu Val Leu Tyr Glu Asp Glu Pro Leu Lys Glu Tyr Tyr Thr Leu
 195 200 205
 Met Asp Ile Ala Tyr Ile Tyr Pro Trp Arg Arg Asn Gly Pro Leu Pro
 210 215 220
 Leu Lys Tyr Arg Val Gln Pro Ala Cys Lys Arg Leu Thr Leu Ala Thr
 225 230 235 240
 Val Pro Thr Pro Ser Glu Gly Thr Asn Thr Ser Gly Ala Ser Glu Cys
 245 250 255
 Glu Ser Val Ser Asp Lys Ala Pro Ser Pro Ala Thr Leu Pro Ala Thr
 260 265 270
 Ser Ser Ser Leu Pro Ser Pro Ala Thr Pro Ser His Gly Ser Pro Ser
 275 280 285
 Ser His Gly Pro Pro Ala Thr His Pro Thr Ser Pro Thr Pro Pro Ser
 290 295 300
 Thr Ala Ser Gly Ala Thr Thr Ala Ala Asn Gly Gly Ser Leu Asn Cys
 305 310 315 320
 Leu Gln Thr Pro Ser Ser Thr Ser Arg Gly Arg Lys Met Thr Val Asn
 325 330 335
 Gly Ala Pro Val Pro Pro Leu Thr
 340
 <210> 78
 <211> 416
 <212> PRT
 <213> Homo sapiens

<400> 78
 Met Ser Ser Asn Cys Thr Ser Thr Thr Ala Val Ala Val Ala Pro Leu
 1 5 10 15
 Ser Ala Ser Lys Thr Lys Thr Lys Lys His Phe Val Cys Gln Lys
 20 25 30
 Val Lys Leu Phe Arg Ala Ser Glu Pro Ile Leu Ser Val Leu Met Trp
 35 40 45
 Gly Val Asn His Thr Ile Asn Glu Leu Ser Asn Val Pro Val Pro Val
 50 55 60
 Met Leu Met Pro Asp Asp Phe Lys Ala Tyr Ser Lys Ile Lys Val Asp
 65 70 75 80
 Asn His Leu Phe Asn Lys Glu Asn Leu Pro Ser Arg Phe Lys Phe Lys
 85 90 95
 Glu Tyr Cys Pro Met Val Phe Arg Asn Leu Arg Glu Arg Phe Gly Ile
 100 105 110
 Asp Asp Gln Asp Tyr Gln Asn Ser Val Thr Arg Ser Ala Pro Ile Asn
 115 120 125
 Ser Asp Ser Gln Gly Arg Cys Gly Thr Arg Phe Leu Thr Thr Tyr Asp
 130 135 140
 Arg Arg Phe Val Ile Lys Thr Val Ser Ser Glu Asp Val Ala Glu Met
 145 150 155 160
 His Asn Ile Leu Lys Lys Tyr His Gln Phe Ile Val Glu Cys His Gly
 165 170 175
 Asn Thr Leu Leu Pro Gln Phe Leu Gly Met Tyr Arg Leu Thr Val Asp
 180 185 190
 Gly Val Glu Thr Tyr Met Val Val Thr Arg Asn Val Phe Ser His Arg
 195 200 205
 Leu Thr Val His Arg Lys Tyr Asp Leu Lys Gly Ser Thr Val Ala Arg
 210 215 220
 Glu Ala Ser Asp Lys Glu Lys Ala Lys Asp Leu Pro Thr Phe Lys Asp
 225 230 235 240
 Asn Asp Phe Leu Asn Glu Gly Gln Lys Leu His Val Gly Glu Glu Ser
 245 250 255
 Lys Lys Asn Phe Leu Glu Lys Leu Lys Arg Asp Val Glu Phe Leu Ala
 260 265 270

Gln Leu Lys Ile Met Asp Tyr Ser Leu Leu Val Gly Ile His Asp Val
 275 280 285
 Asp Arg Ala Glu Gln Glu Glu Met Glu Val Glu Glu Arg Ala Glu Asp
 290 295 300
 Glu Glu Cys Glu Asn Asp Gly Val Gly Gly Asn Leu Leu Cys Ser Tyr
 305 310 315 320
 Gly Thr Pro Pro Asp Ser Pro Gly Asn Leu Leu Ser Phe Pro Arg Phe
 325 330 335
 Phe Gly Pro Gly Glu Phe Asp Pro Ser Val Asp Val Tyr Ala Met Lys
 340 345 350
 Ser His Glu Ser Ser Pro Lys Lys Glu Val Tyr Phe Met Ala Ile Ile
 355 360 365
 Asp Ile Leu Thr Pro Tyr Asp Thr Lys Lys Lys Ala Ala His Ala Ala
 370 375 380
 Lys Thr Val Lys His Gly Ala Gly Ala Glu Ile Ser Thr Val Asn Pro
 385 390 395 400
 Glu Gln Tyr Ser Lys Arg Phe Asn Glu Phe Met Ser Asn Ile Leu Thr
 405 410 415

<210> 79

<211> 500

<212> PRT

<213> Homo sapiens

<400> 79

Met Arg Gly Glu Leu Trp Leu Leu Val Leu Val Leu Arg Glu Ala Ala
 1 5 10 15
 Arg Ala Leu Ser Pro Gln Pro Gly Ala Gly His Asp Glu Gly Pro Gly
 20 25 30
 Ser Gly Trp Ala Ala Lys Gly Thr Val Arg Gly Trp Asn Arg Arg Ala
 35 40 45
 Arg Glu Ser Pro Gly His Val Ser Glu Pro Asp Arg Thr Gln Leu Ser
 50 55 60
 Gln Asp Leu Gly Gly Gly Thr Leu Ala Met Asp Thr Leu Pro Asp Asn
 65 70 75 80
 Arg Thr Arg Val Val Glu Asp Asn His Ser Tyr Tyr Val Ser Arg Leu
 85 90 95
 Tyr Gly Pro Ser Glu Pro His Ser Arg Glu Leu Trp Val Asp Val Ala
 100 105 110
 Glu Ala Asn Arg Ser Gln Val Lys Ile His Thr Ile Leu Ser Asn Thr
 115 120 125
 His Arg Gln Ala Ser Arg Val Val Leu Ser Phe Asp Phe Pro Phe Tyr
 130 135 140
 Gly His Pro Leu Arg Gln Ile Thr Ile Ala Thr Gly Gly Phe Ile Phe
 145 150 155 160
 Met Gly Asp Val Ile His Arg Met Leu Thr Ala Thr Gln Tyr Val Ala
 165 170 175
 Pro Leu Met Ala Asn Phe Asn Pro Gly Tyr Ser Asp Asn Ser Thr Val
 180 185 190
 Val Tyr Phe Asp Asn Gly Thr Val Phe Val Val Gln Trp Asp His Val
 195 200 205
 Tyr Leu Gln Gly Trp Glu Asp Lys Gly Ser Phe Thr Phe Gln Ala Ala
 210 215 220
 Leu His His Asp Gly Arg Ile Val Phe Ala Tyr Lys Glu Ile Pro Met
 225 230 235 240
 Ser Val Pro Glu Ile Ser Ser Ser Gln His Pro Val Lys Thr Gly Leu
 245 250 255
 Ser Asp Ala Phe Met Ile Leu Asn Pro Ser Pro Asp Val Pro Glu Ser
 260 265 270
 Arg Arg Arg Ser Ile Phe Glu Tyr His Arg Ile Glu Leu Asp Pro Ser
 275 280 285

Lys Val Thr Ser Met Ser Ala Val Glu Phe Thr Pro Leu Pro Thr Cys
 290 295 300
 Leu Gln His Arg Ser Cys Asp Ala Cys Met Ser Ser Asp Leu Thr Phe
 305 310 315 320
 Asn Cys Ser Trp Cys His Val Leu Gln Arg Cys Ser Ser Gly Phe Asp
 325 330 335
 Arg Tyr Arg Gln Glu Trp Met Asp Tyr Gly Cys Ala Gln Glu Ala Glu
 340 345 350
 Gly Arg Met Cys Glu Asp Phe Gln Asp Glu Asp His Asp Ser Ala Ser
 355 360 365
 Pro Asp Thr Ser Phe Ser Pro Tyr Asp Gly Asp Leu Thr Thr Thr Ser
 370 375 380
 Ser Ser Leu Phe Ile Asp Ser Leu Thr Thr Glu Asp Asp Thr Lys Leu
 385 390 395 400
 Asn Pro Tyr Ala Gly Gly Asp Gly Leu Gln Asn Asn Leu Ser Pro Lys
 405 410 415
 Thr Lys Gly Thr Pro Val His Leu Gly Thr Ile Val Gly Ile Val Leu
 420 425 430
 Ala Val Leu Leu Val Ala Ala Ile Leu Ala Gly Ile Tyr Ile Asn
 435 440 445
 Gly His Pro Thr Ser Asn Ala Ala Leu Phe Phe Ile Glu Arg Arg Pro
 450 455 460
 His His Trp Pro Ala Met Lys Phe Arg Ser His Pro Asp His Ser Thr
 465 470 475 480
 Tyr Ala Glu Val Glu Pro Ser Gly His Glu Lys Glu Gly Phe Met Glu
 485 490 495
 Ala Glu Gln Cys
 500

<210> 80

<211> 509

<212> PRT

<213> Homo sapiens

<400> 80

Met Glu Asp Ile Gln Thr Asn Ala Glu Leu Lys Ser Thr Gln Glu Gln
 1 5 10 15
 Ser Val Pro Ala Glu Ser Ala Ala Val Leu Asn Asp Tyr Ser Leu Thr
 20 25 30
 Lys Ser His Glu Met Glu Asn Val Asp Ser Gly Glu Gly Pro Ala Asn
 35 40 45
 Glu Asp Glu Asp Ile Gly Asp Asp Ser Met Lys Val Lys Asp Glu Tyr
 50 55 60
 Ser Glu Arg Asp Glu Asn Val Leu Lys Ser Glu Pro Met Gly Asn Ala
 65 70 75 80
 Glu Glu Pro Glu Ile Pro Tyr Ser Tyr Ser Arg Glu Tyr Asn Glu Tyr
 85 90 95
 Glu Asn Ile Lys Leu Glu Arg His Val Val Ser Phe Asp Ser Ser Arg
 100 105 110
 Pro Thr Ser Gly Lys Met Asn Cys Asp Val Cys Gly Leu Ser Cys Ile
 115 120 125
 Ser Phe Asn Val Leu Met Val His Lys Arg Ser His Thr Gly Glu Arg
 130 135 140
 Pro Phe Gln Cys Asn Gln Cys Gly Ala Ser Phe Thr Gln Lys Gly Asn
 145 150 155 160
 Leu Leu Arg His Ile Lys Leu His Thr Gly Glu Lys Pro Phe Lys Cys
 165 170 175
 His Leu Cys Asn Tyr Ala Cys Gln Arg Arg Asp Ala Leu Thr Gly His
 180 185 190
 Leu Arg Thr His Ser Val Glu Lys Pro Tyr Lys Cys Glu Phe Cys Gly
 195 200 205

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Arg Ser Tyr Lys Gln Arg Ser Ser Leu Glu Glu His Lys Glu Arg Cys
210          215          220
Arg Thr Phe Leu Gln Ser Thr Asp Pro Gly Asp Thr Ala Ser Ala Glu
225          230          235          240
Ala Arg His Ile Lys Ala Glu Met Gly Ser Glu Arg Ala Leu Val Leu
          245          250          255
Asp Arg Leu Ala Ser Asn Val Ala Lys Arg Lys Ser Ser Met Pro Gln
          260          265          270
Lys Phe Ile Gly Glu Lys Arg His Cys Phe Asp Val Asn Tyr Asn Ser
          275          280          285
Ser Tyr Met Tyr Glu Lys Glu Ser Glu Leu Ile Gln Thr Arg Met Met
290          295          300
Asp Gln Ala Ile Asn Asn Ala Ile Ser Tyr Leu Gly Ala Glu Ala Leu
305          310          315          320
Cys Pro Leu Val Gln Thr Pro Pro Ala Pro Thr Ser Glu Met Val Pro
          325          330          335
Val Ile Ser Ser Met Tyr Pro Ile Ala Leu Thr Arg Ala Glu Met Ser
          340          345          350
Asn Gly Ala Pro Gln Glu Leu Glu Arg Lys Ser Ile Leu Leu Pro Glu
          355          360          365
Lys Ser Val Pro Ser Glu Arg Gly Leu Ser Pro Asn Asn Ser Gly His
370          375          380
Asp Ser Thr Asp Thr Asp Ser Asn His Glu Glu Arg Gln Asn His Ile
385          390          395          400
Tyr Gln Gln Asn His Met Val Leu Ser Arg Ala Arg Asn Gly Met Pro
          405          410          415
Leu Leu Lys Glu Val Pro Arg Ser Tyr Glu Leu Leu Lys Pro Pro Pro
          420          425          430
Ile Cys Pro Arg Asp Ser Val Lys Val Ile Asp Lys Glu Gly Glu Val
          435          440          445
Met Asp Val Tyr Arg Cys Asp His Cys Arg Val Leu Phe Leu Asp Tyr
450          455          460
Val Met Phe Thr Ile His Met Gly Cys His Gly Phe Arg Asp Pro Phe
465          470          475          480
Glu Cys Asn Met Cys Gly Asp Arg Ser His Asp Arg Tyr Glu Phe Ser
          485          490          495
Ser His Ile Ala Arg Gly Glu His Arg Ser Leu Leu Lys
          500          505

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<210> 81

<211> 440

<212> PRT

<213> Homo sapiens

<400> 81

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Met Pro Ile Pro Pro Pro Pro Pro Pro Gly Pro Pro Pro Pro
1          5          10          15
Pro Thr Phe His Gln Ala Asn Thr Glu Gln Pro Lys Leu Ser Arg Asp
          20          25          30
Glu Gln Arg Gly Arg Gly Ala Leu Leu Gln Asp Ile Cys Lys Gly Thr
          35          40          45
Lys Leu Lys Lys Val Thr Asn Ile Asn Asp Arg Ser Ala Pro Ile Leu
50          55          60
Glu Lys Pro Lys Gly Ser Ser Gly Gly Tyr Gly Ser Gly Gly Ala Ala
65          70          75          80
Leu Gln Pro Lys Gly Gly Leu Phe Gln Gly Gly Val Leu Lys Leu Arg
          85          90          95
Pro Val Gly Ala Lys Asp Gly Ser Glu Asn Leu Ala Gly Lys Pro Ala
100          105          110
Leu Gln Ile Pro Ser Ser Arg Ala Ala Ala Pro Arg Pro Pro Val Ser
115          120          125

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Ala Ala Ser Gly Arg Pro Gln Asp Asp Thr Asp Ser Ser Arg Ala Ser
 130 135 140
 Leu Pro Glu Leu Pro Arg Met Gln Arg Pro Ser Leu Pro Asp Leu Ser
 145 150 155 160
 Arg Pro Asn Thr Thr Ser Ser Thr Gly Met Lys His Ser Ser Ser Ala
 165 170 175
 Pro Pro Pro Pro Pro Gly Arg Arg Ala Asn Ala Pro Pro Thr Pro
 180 185 190
 Leu Pro Met His Ser Ser Lys Ala Pro Ala Tyr Asn Arg Glu Lys Pro
 195 200 205
 Leu Pro Pro Thr Pro Gly Gln Arg Leu His Pro Gly Arg Glu Gly Pro
 210 215 220
 Pro Ala Pro Pro Pro Val Lys Pro Pro Pro Ser Pro Val Asn Ile Arg
 225 230 235 240
 Thr Gly Pro Ser Gly Gln Ser Leu Ala Pro Pro Pro Pro Pro Tyr Arg
 245 250 255
 Gln Pro Pro Gly Val Pro Asn Gly Pro Ser Ser Pro Thr Asn Glu Ser
 260 265 270
 Ala Pro Glu Leu Pro Gln Arg His Asn Ser Leu His Arg Lys Thr Pro
 275 280 285
 Gly Pro Val Arg Gly Leu Ala Pro Pro Pro Pro Thr Ser Ala Ser Pro
 290 295 300
 Ser Leu Leu Ser Asn Arg Pro Pro Pro Ala Arg Asp Pro Pro Ser
 305 310 315 320
 Arg Gly Ala Ala Pro Pro Pro Pro Pro Val Ile Arg Asn Gly Ala
 325 330 335
 Arg Asp Ala Pro Pro Pro Pro Pro Tyr Arg Met His Gly Ser Glu
 340 345 350
 Pro Pro Ser Arg Gly Lys Pro Pro Pro Pro Ser Arg Thr Pro Ala
 355 360 365
 Gly Pro Pro Pro Pro Pro Pro Pro Pro Leu Arg Asn Gly His Arg Asp
 370 375 380
 Ser Ile Thr Thr Val Arg Ser Phe Leu Asp Asp Phe Glu Ser Lys Tyr
 385 390 395 400
 Ser Phe His Pro Val Glu Asp Phe Pro Ala Pro Glu Glu Tyr Lys His
 405 410 415
 Phe Gln Arg Ile Tyr Pro Ser Lys Thr Asn Arg Ala Ala Arg Gly Ala
 420 425 430
 Pro Pro Leu Pro Pro Ile Leu Arg
 435 440
 <210> 82
 <211> 205
 <212> PRT
 <213> Homo sapiens
 <400> 82
 Met Ser Ile Met Ser Tyr Asn Gly Gly Ala Val Met Ala Met Lys Gly
 1 5 10 15
 Lys Asn Cys Val Ala Ile Ala Ala Asp Arg Arg Phe Gly Ile Gln Ala
 20 25 30
 Gln Met Val Thr Thr Asp Phe Gln Lys Ile Phe Pro Met Gly Asp Arg
 35 40 45
 Leu Tyr Ile Gly Leu Ala Gly Leu Ala Thr Asp Val Gln Thr Val Ala
 50 55 60
 Gln Arg Leu Lys Phe Arg Leu Asn Leu Tyr Glu Leu Lys Glu Gly Arg
 65 70 75 80
 Gln Ile Lys Pro Tyr Thr Leu Met Ser Met Val Ala Asn Leu Leu Tyr
 85 90 95
 Glu Lys Arg Phe Gly Pro Tyr Tyr Thr Glu Pro Val Ile Ala Gly Leu
 100 105 110

Asp Pro Lys Thr Phe Lys Pro Phe Ile Cys Ser Leu Asp Leu Ile Gly
 115 120 125
 Cys Pro Met Val Thr Asp Asp Phe Val Val Ser Gly Thr Cys Ala Glu
 130 135 140
 Gln Met Tyr Gly Met Cys Glu Ser Leu Trp Glu Pro Asn Met Asp Pro
 145 150 155 160
 Asp His Leu Phe Glu Thr Ile Ser Gln Ala Met Leu Asn Ala Val Asp
 165 170 175
 Arg Asp Ala Val Ser Gly Met Gly Val Ile Val His Ile Ile Glu Lys
 180 185 190
 Asp Lys Ile Thr Thr Arg Thr Leu Lys Ala Arg Met Asp
 195 200 205
 <210> 83
 <211> 190
 <212> PRT
 <213> Homo sapiens

<400> 83
 Leu Thr Arg Ser Cys Ser Thr Cys Cys Pro Ala Val Ala Cys Leu Val
 1 5 10 15
 Gly Arg Gly Val Val Thr Ser Gly Ala Met His Gln Cys Trp Gly Glu
 20 25 30
 Glu Met Leu Gln Gly Met Leu Leu Trp Gly Trp Ala Thr Cys Pro Leu
 35 40 45
 Ser Asn Pro Gly Arg Trp Gly Arg Thr Val Gly Leu Gln His Pro Ala
 50 55 60
 Val Val Ser Ala Phe Arg Ala Leu Leu Leu Leu Met Leu Thr Val His
 65 70 75 80
 Val Ser Tyr Leu Ser Leu Ile Arg Phe Asp Tyr Gly Tyr Asn Leu Val
 85 90 95
 Ala Asn Val Ala Ile Gly Leu Val Asn Val Val Trp Trp Leu Ala Trp
 100 105 110
 Cys Leu Trp Asn Gln Arg Arg Leu Pro His Val Arg Lys Cys Val Val
 115 120 125
 Val Val Leu Leu Leu Gln Gly Leu Ser Leu Leu Glu Leu Leu Asp Phe
 130 135 140
 Pro Pro Leu Phe Trp Val Leu Asp Ala His Ala Ile Trp His Ile Ser
 145 150 155 160
 Thr Ile Pro Val His Val Leu Phe Phe Ser Phe Leu Glu Asp Asp Ser
 165 170 175
 Leu Tyr Leu Leu Lys Glu Ser Glu Asp Lys Phe Lys Leu Asp
 180 185 190
 <210> 84
 <211> 368
 <212> PRT
 <213> Homo sapiens

<400> 84
 Ala Pro Pro Pro Ala Ala Ser Gln Gly Glu Arg Met Ala Gly Leu Ala
 1 5 10 15
 Ala Arg Leu Val Leu Leu Ala Gly Ala Ala Ala Leu Ala Ser Gly Ser
 20 25 30
 Gln Gly Asp Arg Glu Pro Val Tyr Arg Asp Cys Val Leu Gln Cys Glu
 35 40 45
 Glu Gln Asn Cys Ser Gly Gly Ala Leu Asn His Phe Arg Ser Arg Gln
 50 55 60

Pro Ile Tyr Met Ser Leu Ala Gly Trp Thr Cys Arg Asp Asp Cys Lys
 65 70 75 80
 Tyr Glu Cys Met Trp Val Thr Val Gly Leu Tyr Leu Gln Glu Gly His
 85 90 95
 Lys Val Pro Gln Phe His Gly Lys Trp Pro Phe Ser Arg Phe Leu Phe
 100 105 110
 Phe Gln Glu Pro Ala Ser Ala Val Ala Ser Phe Leu Asn Gly Leu Ala
 115 120 125
 Ser Leu Val Met Leu Cys Arg Tyr Arg Thr Phe Val Pro Ala Ser Ser
 130 135 140
 Pro Met Tyr His Thr Cys Val Ala Phe Ala Trp Val Ser Leu Asn Ala
 145 150 155 160
 Trp Phe Trp Ser Thr Val Phe His Thr Arg Asp Thr Asp Leu Thr Glu
 165 170 175
 Lys Met Asp Tyr Phe Cys Ala Ser Thr Val Ile Leu His Ser Ile Tyr
 180 185 190
 Leu Cys Cys Val Arg Thr Val Gly Leu Gln His Pro Ala Val Val Ser
 195 200 205
 Ala Phe Arg Ala Leu Leu Leu Leu Met Leu Thr Val His Val Ser Tyr
 210 215 220
 Leu Ser Leu Ile Arg Phe Asp Tyr Gly Tyr Asn Leu Val Ala Asn Val
 225 230 235 240
 Ala Ile Gly Leu Val Asn Val Val Trp Trp Leu Ala Trp Cys Leu Trp
 245 250 255
 Asn Gln Arg Arg Leu Pro His Val Arg Lys Cys Val Val Val Val Leu
 260 265 270
 Leu Leu Gln Gly Leu Ser Leu Leu Glu Leu Leu Asp Phe Pro Pro Leu
 275 280 285
 Phe Trp Val Leu Asp Ala His Ala Ile Trp His Ile Ser Thr Ile Pro
 290 295 300
 Val His Val Leu Phe Phe Ser Phe Leu Glu Asp Asp Ser Leu Tyr Leu
 305 310 315 320
 Leu Lys Glu Ser Glu Asp Lys Phe Lys Leu Val Glu Ala Asp Trp Ile
 325 330 335
 Phe Ala Leu Pro Leu Thr Pro Cys Pro Ser Leu Arg Glu Gly Ser Tyr
 340 345 350
 Ala Arg Thr Pro Thr Ser Gly Thr Arg Val Ala Cys Ala Ser Phe Phe
 355 360 365
 <210> 85
 <211> 190
 <212> PRT
 <213> Homo sapiens

<400> 85
 Leu Thr Arg Ser Cys Ser Thr Cys Cys Pro Ala Val Ala Cys Leu Val
 1 5 10 15
 Gly Arg Gly Val Val Thr Ser Gly Ala Met His Gln Cys Trp Gly Glu
 20 25 30
 Glu Met Leu Gln Gly Met Leu Leu Trp Gly Trp Ala Thr Cys Pro Leu
 35 40 45
 Ser Asn Pro Gly Arg Trp Gly Arg Thr Val Gly Leu Gln His Pro Ala
 50 55 60
 Val Val Ser Ala Phe Arg Ala Leu Leu Leu Leu Met Leu Thr Val His
 65 70 75 80
 Val Ser Tyr Leu Ser Leu Ile Arg Phe Asp Tyr Gly Tyr Asn Leu Val
 85 90 95
 Ala Asn Val Ala Ile Gly Leu Val Asn Val Val Trp Trp Leu Ala Trp
 100 105 110
 Cys Leu Trp Asn Gln Arg Arg Leu Pro His Val Arg Lys Cys Val Val
 115 120 125

Val Val Leu Leu Leu Gln Gly Leu Ser Leu Leu Glu Leu Leu Asp Phe
 130 135 140
 Pro Pro Leu Phe Trp Val Leu Asp Ala His Ala Ile Trp His Ile Ser
 145 150 155 160
 Thr Ile Pro Val His Val Leu Phe Phe Ser Phe Leu Glu Asp Asp Ser
 165 170 175
 Leu Tyr Leu Leu Lys Glu Ser Glu Asp Lys Phe Lys Leu Asp
 180 185 190

<210> 86

<211> 318

<212> PRT

<213> Homo sapiens

<400> 86
 Met Ala Gly Leu Ala Ala Arg Leu Val Leu Leu Ala Gly Ala Ala Ala
 1 5 10 15
 Leu Ala Ser Gly Ser Gln Gly Asp Arg Glu Pro Val Tyr Arg Asp Cys
 20 25 30
 Val Leu Gln Cys Glu Glu Gln Asn Cys Ser Gly Gly Ala Leu Asn His
 35 40 45
 Phe Arg Ser Arg Gln Pro Ile Tyr Met Ser Leu Ala Gly Trp Thr Cys
 50 55 60
 Arg Asp Asp Cys Lys Tyr Glu Cys Met Trp Val Thr Val Gly Leu Tyr
 65 70 75 80
 Leu Gln Glu Gly His Lys Val Pro Gln Phe His Gly Lys Trp Pro Phe
 85 90 95
 Ser Arg Phe Leu Phe Phe Gln Glu Pro Ala Ser Ala Val Ala Ser Phe
 100 105 110
 Leu Asn Gly Leu Ala Ser Leu Val Met Leu Cys Arg Tyr Arg Thr Phe
 115 120 125
 Val Pro Ala Ser Ser Pro Met Tyr His Thr Cys Val Ala Phe Ala Trp
 130 135 140
 Val Ser Leu Asn Ala Trp Phe Trp Ser Thr Val Phe His Thr Arg Asp
 145 150 155 160
 Thr Asp Leu Gln Arg Lys Trp Thr Thr Ser Val Pro Pro Val Ser Tyr
 165 170 175
 Thr Gln Ser Thr Cys Ala Ala Ser Gly Pro Trp Gly Cys Ser Thr Gln
 180 185 190
 Leu Trp Ser Ser Ala Phe Arg Ala Leu Leu Leu Met Leu Thr Val
 195 200 205
 His Val Ser Tyr Leu Ser Leu Ile Arg Phe Asp Tyr Gly Tyr Asn Leu
 210 215 220
 Val Ala Asn Val Ala Ile Gly Leu Val Asn Val Val Trp Trp Leu Ala
 225 230 235 240
 Trp Cys Leu Trp Asn Gln Arg Arg Leu Pro His Val Arg Lys Cys Val
 245 250 255
 Val Val Val Leu Leu Leu Gln Gly Leu Ser Leu Leu Glu Leu Leu Asp
 260 265 270
 Phe Pro Pro Leu Phe Trp Val Leu Asp Ala His Ala Ile Trp His Ile
 275 280 285
 Ser Thr Ile Pro Val His Val Leu Phe Phe Ser Phe Leu Glu Asp Asp
 290 295 300
 Ser Leu Tyr Leu Leu Lys Glu Ser Glu Asp Lys Phe Lys Leu
 305 310 315

<210> 87

<211> 226

<212> PRT

<213> Homo sapiens

<400> 87
 Met Ala Gly Leu Ala Ala Arg Leu Val Leu Leu Ala Gly Ala Ala Ala
 1 5 10 15
 Leu Ala Ser Gly Ser Gln Gly Asp Arg Glu Pro Val Tyr Arg Asp Cys
 20 25 30
 Val Leu Gln Cys Glu Glu Gln Asn Cys Ser Gly Gly Ala Leu Asn His
 35 40 45
 Phe Arg Ser Arg Gln Pro Ile Tyr Met Ser Leu Ala Gly Trp Thr Cys
 50 55 60
 Arg Asp Asp Cys Lys Tyr Glu Cys Met Trp Val Thr Val Gly Leu Tyr
 65 70 75 80
 Leu Gln Glu Gly His Lys Val Pro Gln Phe His Gly Lys Trp Pro Phe
 85 90 95
 Ser Arg Phe Leu Phe Phe Gln Glu Pro Ala Ser Ala Val Ala Ser Phe
 100 105 110
 Leu Asn Gly Leu Ala Ser Leu Val Met Leu Cys Arg Tyr Arg Thr Phe
 115 120 125
 Val Pro Ala Ser Ser Pro Met Tyr His Thr Cys Val Ala Phe Ala Trp
 130 135 140
 Val Ser Leu Asn Ala Trp Phe Trp Ser Thr Val Phe His Thr Arg Asp
 145 150 155 160
 Thr Asp Leu Thr Glu Lys Met Asp Tyr Phe Cys Ala Ser Thr Val Ile
 165 170 175
 Leu His Ser Ile Tyr Leu Cys Cys Val Arg Pro Gly Gln Arg Gly Val
 180 185 190
 Val Ala Gly Leu Val Pro Val Glu Pro Ala Ala Ala Ala Ser Arg Ala
 195 200 205
 Gln Val Arg Gly Gly Gly Leu Ala Ala Ala Gly Ala Val Pro Ala Arg
 210 215 220
 Ala Ala
 225
 <210> 88
 <211> 320
 <212> PRT
 <213> Homo sapiens

<400> 88
 Met Ala Gly Leu Ala Ala Arg Leu Val Leu Leu Ala Gly Ala Ala Ala
 1 5 10 15
 Leu Ala Ser Gly Ser Gln Gly Asp Arg Glu Pro Val Tyr Arg Asp Cys
 20 25 30
 Val Leu Gln Cys Glu Glu Gln Asn Cys Ser Gly Gly Ala Leu Asn His
 35 40 45
 Phe Arg Ser Arg Gln Pro Ile Tyr Met Ser Leu Ala Gly Trp Thr Cys
 50 55 60
 Arg Asp Asp Cys Lys Tyr Glu Cys Met Trp Val Thr Val Gly Leu Tyr
 65 70 75 80
 Leu Gln Glu Gly His Lys Val Pro Gln Phe His Gly Lys Trp Pro Phe
 85 90 95
 Ser Arg Phe Leu Phe Phe Gln Glu Pro Ala Ser Ala Val Ala Ser Phe
 100 105 110
 Leu Asn Gly Leu Ala Ser Leu Val Met Leu Cys Arg Tyr Arg Thr Phe
 115 120 125
 Val Pro Ala Ser Ser Pro Met Tyr His Thr Cys Val Ala Phe Ala Trp
 130 135 140
 Val Ser Leu Asn Ala Trp Phe Trp Ser Thr Val Phe His Thr Arg Asp
 145 150 155 160

<210> 89

<211> 217

<212> PRT

<213> Homo sapiens

<400> 89

Ala 1	Pro	Pro	Pro	Ala 5	Ala	Ser	Gln	Gly	Glu 10	Arg	Met	Ala	Gly	Leu 15	Ala
Ala	Arg	Leu 20	Val	Leu	Leu	Ala	Gly 25	Ala	Ala	Ala	Leu	Ala	Ser 30	Gly	Ser
Gln	Gly 35	Asp	Arg	Glu	Pro	Val	Tyr 40	Arg	Asp	Cys	Val	Leu 45	Gln	Cys	Glu
Glu 50	Gln	Asn	Cys	Ser	Gly	Gly 55	Ala	Leu	Asn	His	Phe 60	Arg	Ser	Arg	Gln
Pro 65	Ile	Tyr	Met	Ser	Leu 70	Ala	Gly	Trp	Thr	Cys 75	Arg	Asp	Asp	Cys	Lys
Tyr	Glu	Cys	Met	Trp 85	Val	Thr	Val	Gly	Leu 90	Tyr	Leu	Gln	Glu	Gly 95	His
Lys	Val	Pro	Gln 100	Phe	His	Gly	Lys	Trp 105	Pro	Phe	Ser	Arg	Phe 110	Leu	Phe
Phe	Gln 115	Glu	Pro	Ala	Ser	Ala	Val 120	Ala	Ser	Phe	Leu	Asn 125	Gly	Leu	Ala
Ser	Leu 130	Val	Met	Leu	Cys	Arg 135	Tyr	Arg	Thr	Phe 140	Val	Pro	Ala	Ser	Ser
Pro 145	Met	Tyr	His	Thr 150	Cys	Val	Ala	Phe	Ala 155	Trp	Val	Ser	Leu	Asn	Ala
Trp	Phe	Trp	Ser 165	Thr	Val	Phe	His	Thr 170	Arg	Asp	Thr	Asp	Leu 175	Thr	Glu
Lys	Met	Asp 180	Tyr	Phe	Cys	Ala	Ser 185	Thr	Val	Ile	Leu	His 190	Ser	Ile	Tyr
Leu	Cys 195	Cys	Val	Ser	Phe	Leu	Glu 200	Asp	Asp	Ser	Leu	Tyr 205	Leu	Leu	Lys
Glu	Ser 210	Glu	Asp	Lys	Phe	Lys 215	Leu	Asp							

<210> 90

<211> 153

<212> PRT

<213> Homo sapiens

<400> 90

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Met Asn Val Gly Thr Ala His Ser Glu Val Asn Pro Asn Thr Arg Val
1      5      10      15
Met Asn Ser Arg Gly Ile Trp Leu Ser Tyr Val Leu Ala Ile Gly Leu
      20      25      30
Leu His Ile Val Leu Leu Ser Ile Pro Phe Val Ser Val Pro Val Val
      35      40      45
Trp Thr Leu Thr Asn Leu Ile His Asn Met Gly Met Tyr Ile Phe Leu
      50      55      60
His Thr Val Lys Gly Thr Pro Phe Glu Thr Pro Asp Gln Gly Lys Ala
      65      70      75      80
Arg Leu Leu Thr His Trp Glu Gln Met Asp Tyr Gly Val Gln Phe Thr
      85      90      95
Ala Ser Arg Lys Phe Leu Thr Ile Thr Pro Ile Val Leu Tyr Phe Leu
      100      105      110
Thr Ser Phe Tyr Thr Lys Tyr Asp Gln Ile His Phe Val Leu Asn Thr
      115      120      125
Val Ser Leu Met Ser Val Leu Ile Pro Lys Leu Pro Gln Leu His Gly
      130      135      140
Val Arg Ile Phe Gly Ile Asn Lys Tyr
145      150

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<210> 91

<211> 436

<212> PRT

<213> Homo sapiens

<400> 91

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Met Arg Arg Asp Val Asn Gly Val Thr Lys Ser Arg Phe Glu Met Phe
1      5      10      15
Ser Asn Ser Asp Glu Ala Val Ile Asn Lys Lys Leu Pro Lys Glu Leu
      20      25      30
Leu Leu Arg Ile Phe Ser Phe Leu Asp Val Val Thr Leu Cys Arg Cys
      35      40      45
Ala Gln Val Ser Arg Ala Trp Asn Val Leu Ala Leu Asp Gly Ser Asn
      50      55      60
Trp Gln Arg Ile Asp Leu Phe Asp Phe Gln Arg Asp Ile Glu Gly Arg
      65      70      75      80
Val Val Glu Asn Ile Ser Lys Arg Cys Gly Gly Phe Leu Arg Lys Leu
      85      90      95
Ser Leu Arg Gly Cys Leu Gly Val Gly Asp Asn Ala Leu Arg Thr Phe
      100      105      110
Ala Gln Asn Cys Arg Asn Ile Glu Val Leu Asn Leu Asn Gly Cys Thr
      115      120      125
Lys Thr Thr Asp Ala Thr Cys Thr Ser Leu Ser Lys Phe Cys Ser Lys
      130      135      140
Leu Arg His Leu Asp Leu Ala Ser Cys Thr Ser Ile Thr Asn Met Ser
145      150      155      160
Leu Lys Ala Leu Ser Glu Gly Cys Pro Leu Leu Glu Gln Leu Asn Ile
      165      170      175
Ser Trp Cys Asp Gln Val Thr Lys Asp Gly Ile Gln Ala Leu Val Arg
      180      185      190
Gly Cys Gly Gly Leu Lys Ala Leu Phe Leu Lys Gly Cys Thr Gln Leu
      195      200      205
Glu Asp Glu Ala Leu Lys Tyr Ile Gly Ala His Cys Pro Glu Leu Val
      210      215      220
Thr Leu Asn Leu Gln Thr Cys Leu Gln Ile Thr Asp Glu Gly Leu Ile
225      230      235      240

```

Thr Ile Cys Arg Gly Cys His Lys Leu Gln Ser Leu Cys Ala Ser Gly
 245 250 255
 Cys Ser Asn Ile Thr Asp Ala Ile Leu Asn Ala Leu Gly Gln Asn Cys
 260 265 270
 Pro Arg Leu Arg Ile Leu Glu Val Ala Arg Cys Ser Gln Leu Thr Asp
 275 280 285
 Val Gly Phe Thr Thr Leu Ala Arg Asn Cys His Glu Leu Glu Lys Met
 290 295 300
 Asp Leu Glu Glu Cys Val Gln Ile Thr Asp Ser Thr Leu Ile Gln Leu
 305 310 315 320
 Ser Ile His Cys Pro Arg Leu Gln Val Leu Ser Leu Ser His Cys Glu
 325 330 335
 Leu Ile Thr Asp Asp Gly Ile Arg His Leu Gly Asn Gly Ala Cys Ala
 340 345 350
 His Asp Gln Leu Glu Val Ile Glu Leu Asp Asn Cys Pro Leu Ile Thr
 355 360 365
 Asp Ala Ser Leu Glu His Leu Lys Ser Cys His Ser Leu Glu Arg Ile
 370 375 380
 Glu Leu Tyr Asp Cys Gln Gln Ile Thr Arg Ala Gly Ile Lys Arg Leu
 385 390 395 400
 Arg Thr His Leu Pro Asn Ile Lys Val His Ala Tyr Phe Ala Pro Val
 405 410 415
 Thr Pro Pro Pro Ser Val Gly Gly Ser Arg Gln Arg Phe Cys Arg Cys
 420 425 430
 Cys Ile Ile Leu
 435

<210> 92

<211> 204

<212> PRT

<213> Homo sapiens

<400> 92

Met Asp Pro Lys Asp Arg Lys Lys Ile Gln Phe Ser Val Pro Ala Pro
 1 5 10 15
 Pro Ser Gln Leu Asp Pro Arg Gln Val Glu Met Ile Arg Arg Arg
 20 25 30
 Pro Thr Pro Ala Met Leu Phe Arg Leu Ser Glu His Ser Ser Pro Glu
 35 40 45
 Glu Glu Ala Ser Pro His Gln Arg Ala Ser Gly Glu Gly His His Leu
 50 55 60
 Lys Ser Lys Arg Pro Asn Pro Cys Ala Tyr Thr Pro Pro Ser Leu Lys
 65 70 75 80
 Ala Val Gln Arg Ile Ala Glu Ser His Leu Gln Ser Ile Ser Asn Leu
 85 90 95
 Asn Glu Asn Gln Ala Ser Glu Glu Glu Asp Glu Leu Gly Glu Leu Arg
 100 105 110
 Glu Leu Gly Tyr Pro Arg Glu Glu Asp Glu Glu Glu Glu Asp Asp
 115 120 125
 Glu Glu Glu Glu Glu Glu Asp Ser Gln Ala Glu Val Leu Lys Val
 130 135 140
 Ile Arg Gln Ser Ala Gly Gln Lys Thr Thr Cys Gly Gln Gly Leu Glu
 145 150 155 160
 Gly Pro Trp Glu Arg Pro Pro Pro Leu Asp Glu Ser Glu Arg Asp Gly
 165 170 175
 Gly Ser Glu Asp Gln Val Glu Asp Pro Ala Leu Ser Glu Pro Gly Glu
 180 185 190
 Glu Pro Gln Arg Pro Ser Pro Ser Glu Pro Gly Thr
 195 200

<210> 93

<211> 115

<212> PRT

<213> Homo sapiens

<400> 93

```

Met Ser Gly Glu Pro Gly Gln Thr Ser Val Ala Pro Pro Pro Glu Glu
1      5      10      15
Val Glu Pro Gly Ser Gly Val Arg Ile Val Val Glu Tyr Cys Glu Pro
      20      25      30
Cys Gly Phe Glu Ala Thr Tyr Leu Glu Leu Ala Ser Ala Val Lys Glu
      35      40      45
Gln Tyr Pro Gly Ile Glu Ile Glu Ser Arg Leu Gly Gly Thr Gly Ala
      50      55      60
Phe Glu Ile Glu Ile Asn Gly Gln Leu Val Phe Ser Lys Leu Glu Asn
65      70      75      80
Gly Gly Phe Pro Tyr Glu Lys Asp Leu Ile Glu Ala Ile Arg Arg Ala
      85      90      95
Ser Asn Gly Glu Thr Leu Glu Lys Ile Thr Asn Ser Arg Pro Pro Cys
      100      105      110
Val Ile Leu
      115

```

<210> 94

<211> 144

<212> PRT

<213> Homo sapiens

<400> 94

```

Met Gly Ala Val Val Leu Cys Arg Pro Ser Pro Leu Asn Phe Leu Ile
1      5      10      15
Gln Thr Gly Thr Gly Gln Gly Leu Ser Cys Gly Ser His Met Trp Arg
      20      25      30
Cys Glu Ala Thr Pro Cys Gly Val Cys Gly Glu Ser Pro Val Gly Ser
      35      40      45
Leu Leu Lys Gln His Arg Gly Arg Gly Lys Thr Trp Pro Val Gly Thr
      50      55      60
Val Ser Ala Cys Arg Glu Glu Ser Glu Ala Gly Ser Leu Ser Leu Gly
65      70      75      80
Trp Ser Leu Leu Pro Ser Pro Val Gly Leu Gly Ala Val Leu Ile Leu
      85      90      95
Lys Arg Cys Gly Ser Leu Cys Pro Leu Pro Gly Val Gln Gly Asn Arg
      100      105      110
Arg Gly His Trp Ala Cys Phe Leu Pro Pro Asp Pro Ala Ser Pro Thr
      115      120      125
Pro Cys Ile Ile Gly Asn Phe His Leu Lys Ile Phe Leu Ser Lys Val
      130      135      140

```

<210> 95

<211> 425

<212> PRT

<213> Homo sapiens

<400> 95

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Met Gly Gly Gly Asp Leu Asn Leu Lys Lys Ser Trp His Pro Gln Thr
1      5      10      15

```


Met Phe Ser Val Phe Glu Glu Ile Thr Arg Ile Val Val Lys Glu Met
1 5 10 15

Asp	Ala	Gly	Gly	Asp	Met	Ile	Ala	Val	Arg	Ser	Leu	Val	Asp	Ala	Asp
			20					25					30		
Arg	Phe	Arg	Cys	Phe	His	Leu	Val	Gly	Glu	Lys	Arg	Thr	Phe	Phe	Gly
		35					40					45			
Cys	Arg	His	Tyr	Thr	Thr	Gly	Leu	Thr	Leu	Met	Asp	Ile	Leu	Asp	Thr
		50				55					60				
His	Gly	Asp	Lys	Trp	Leu	Asp	Glu	Leu	Asp	Ser	Gly	Leu	Gln	Gly	Gln
65					70				75					80	
Lys	Ala	Glu	Phe	Gln	Ile	Leu	Asp	Asn	Val	Asp	Ser	Thr	Gly	Glu	Leu
			85					90						95	
Ile	Val	Arg	Leu	Pro	Lys	Glu	Ile	Thr	Ile	Ser	Gly	Ser	Phe	Gln	Gly
			100					105					110		
Phe	His	His	Gln	Lys	Ile	Lys	Ile	Ser	Glu	Asn	Arg	Ile	Ser	Gln	Gln
		115					120					125			
Tyr	Leu	Ala	Thr	Leu	Glu	Asn	Arg	Lys	Leu	Lys	Arg	Glu	Leu	Pro	Phe
		130				135					140				
Ser	Phe	Arg	Ser	Ile	Asn	Thr	Arg	Glu	Asn	Leu	Tyr	Leu	Val	Thr	Glu
145					150				155					160	
Thr	Leu	Glu	Thr	Val	Lys	Glu	Glu	Thr	Leu	Lys	Ser	Asp	Arg	Gln	Tyr
			165					170						175	
Lys	Phe	Trp	Ser	Gln	Ile	Ser	Gln	Gly	His	Leu	Ser	Tyr	Lys	His	Lys
			180					185					190		
Gly	Gln	Arg	Glu	Val	Thr	Ile	Pro	Pro	Asn	Arg	Val	Leu	Ser	Tyr	Arg
		195					200					205			
Val	Lys	Gln	Leu	Val	Phe	Pro	Asn	Lys	Glu	Thr	Met	Arg	Lys	Ser	Leu
		210				215					220				
Gly	Ser	Glu	Asp	Ser	Arg	Asn	Met	Lys	Glu	Lys	Leu	Glu	Asp	Met	Glu
225					230				235					240	
Ser	Val	Leu	Lys	Asp	Leu	Thr	Glu	Glu	Lys	Arg	Lys	Asp	Val	Leu	Asn
			245					250						255	
Ser	Leu	Ala	Lys	Cys	Leu	Gly	Lys	Glu	Asp	Ile	Arg	Gln	Asp	Leu	Glu
			260					265					270		
Gln	Arg	Val	Ser	Glu	Val	Leu	Ile	Ser	Gly	Glu	Leu	His	Met	Glu	Asp
		275					280					285			
Pro	Asp	Lys	Pro	Leu	Leu	Ser	Ser	Leu	Phe	Asn	Ala	Ala	Gly	Val	Leu
		290				295					300				
Val	Glu	Ala	Arg	Ala	Lys	Ala	Ile	Leu	Asp	Phe	Leu	Asp	Ala	Leu	Leu
305					310					315				320	
Glu	Leu	Ser	Glu	Glu	Gln	Gln	Phe	Val	Ala	Glu	Ala	Leu	Glu	Lys	Gly
			325					330						335	
Thr	Leu	Pro	Leu	Leu	Lys	Asp	Gln	Val	Lys	Ser	Val	Met	Glu	Gln	Asn
			340					345					350		
Trp	Asp	Glu	Leu	Ala	Ser	Ser	Pro	Pro	Asp	Met	Asp	Tyr	Asp	Pro	Glu
		355					360					365			
Ala	Arg	Ile	Leu	Cys</											

<210> 97

<211> 456

<212> PRT

<213> Homo sapiens

<400> 97

Met	Glu	Gly	Pro	Glu	Gly	Leu	Gly	Arg	Lys	Gln	Ala	Cys	Leu	Ala	Met
1				5					10					15	
Leu	Leu	His	Phe	Leu	Asp	Thr	Tyr	Gln	Gly	Leu	Leu	Gln	Glu	Glu	Glu
		20						25				30			
Gly	Ala	Gly	His	Ile	Ile	Lys	Asp	Leu	Tyr	Leu	Leu	Ile	Met	Lys	Asp
		35					40					45			

Glu Ser Leu Tyr Gln Gly Leu Arg Glu Asp Thr Leu Arg Leu His Gln
 50 55 60
 Leu Val Glu Thr Val Glu Leu Lys Ile Pro Glu Glu Asn Gln Pro Pro
 65 70 75 80
 Ser Lys Gln Val Lys Pro Leu Phe Arg His Phe Arg Arg Ile Asp Ser
 85 90 95
 Cys Leu Gln Thr Arg Val Ala Phe Arg Gly Ser Asp Glu Ile Phe Cys
 100 105 110
 Arg Val Tyr Met Pro Asp His Ser Tyr Val Thr Ile Arg Ser Arg Leu
 115 120 125
 Ser Ala Ser Val Gln Asp Ile Leu Gly Ser Val Thr Glu Lys Leu Gln
 130 135 140
 Tyr Ser Glu Glu Pro Ala Gly Arg Glu Asp Ser Leu Ile Leu Val Ala
 145 150 155 160
 Val Ser Ser Ser Gly Glu Lys Val Leu Leu Gln Pro Thr Glu Asp Cys
 165 170 175
 Val Phe Thr Ala Leu Gly Ile Asn Ser His Leu Phe Ala Cys Thr Arg
 180 185 190
 Asp Ser Tyr Glu Ala Leu Val Pro Leu Pro Glu Glu Ile Gln Val Ser
 195 200 205
 Pro Gly Asp Thr Glu Ile His Arg Val Glu Pro Glu Asp Val Ala Asn
 210 215 220
 His Leu Thr Ala Phe His Trp Glu Leu Phe Arg Cys Val His Glu Leu
 225 230 235 240
 Glu Phe Val Asp Tyr Val Phe His Gly Glu Arg Gly Arg Arg Glu Thr
 245 250 255
 Ala Asn Leu Glu Leu Leu Gln Arg Cys Ser Glu Val Thr His Trp
 260 265 270
 Val Ala Thr Glu Val Leu Leu Cys Glu Ala Pro Gly Lys Arg Ala Gln
 275 280 285
 Leu Leu Lys Lys Phe Ile Lys Ile Ala Ala Leu Cys Lys Gln Asn Gln
 290 295 300
 Asp Leu Leu Ser Phe Tyr Ala Val Val Met Gly Leu Asp Asn Ala Ala
 305 310 315 320
 Val Ser Arg Leu Arg Leu Thr Trp Glu Lys Leu Pro Gly Lys Phe Lys
 325 330 335
 Asn Leu Phe Arg Lys Phe Glu Asn Leu Thr Asp Pro Cys Arg Asn His
 340 345 350
 Lys Ser Tyr Arg Glu Val Ile Ser Lys Met Lys Pro Pro Val Ile Pro
 355 360 365
 Phe Val Pro Leu Ile Leu Lys Asp Leu Thr Phe Leu His Glu Gly Ser
 370 375 380
 Lys Thr Leu Val Asp Gly Leu Val Asn Ile Glu Lys Leu His Ser Val
 385 390 395 400
 Ala Glu Lys Val Arg Thr Ile Arg Lys Tyr Arg Ser Arg Pro Leu Cys
 405 410 415
 Leu Asp Met Glu Ala Ser Pro Asn His Leu Gln Thr Lys Ala Tyr Val
 420 425 430
 Arg Gln Phe Gln Val Ile Asp Asn Gln Asn Leu Leu Phe Glu Leu Ser
 435 440 445
 Tyr Lys Leu Glu Ala Asn Ser Gln
 450 455
 <210> 98
 <211> 715
 <212> PRT
 <213> Homo sapiens
 <400> 98
 Met Ser Gln Val Met Ser Ser Pro Leu Leu Ala Gly Gly His Ala Val
 1 5 10 15

Ser Leu Ala Pro Cys Asp Glu Pro Arg Arg Thr Leu His Pro Ala Pro
 20 25 30
 Ser Pro Ser Leu Pro Pro Gln Cys Ser Tyr Tyr Thr Thr Glu Gly Trp
 35 40 45
 Gly Ala Gln Ala Leu Met Ala Pro Val Pro Cys Met Gly Pro Pro Gly
 50 55 60
 Arg Leu Gln Gln Ala Pro Gln Val Glu Ala Lys Ala Thr Cys Phe Leu
 65 70 75 80
 Pro Ser Pro Gly Glu Lys Ala Leu Gly Thr Pro Glu Asp Leu Asp Ser
 85 90 95
 Tyr Ile Asp Phe Ser Leu Glu Ser Leu Asn Gln Met Ile Leu Glu Leu
 100 105 110
 Asp Pro Thr Phe Gln Leu Leu Pro Pro Gly Thr Gly Gly Ser Gln Ala
 115 120 125
 Glu Leu Ala Gln Ser Thr Met Ser Met Arg Lys Lys Glu Glu Ser Glu
 130 135 140
 Ala Leu Asp Ile Lys Tyr Ile Glu Val Thr Ser Ala Arg Ser Arg Cys
 145 150 155 160
 His Asp Trp Pro Gln His Cys Ser Ser Pro Ser Val Thr Pro Pro Phe
 165 170 175
 Gly Ser Pro Arg Ser Gly Gly Leu Leu Ser Arg Asp Val Pro Arg
 180 185 190
 Glu Thr Arg Ser Ser Ser Glu Ser Leu Ile Phe Ser Gly Asn Gln Gly
 195 200 205
 Arg Gly His Gln Arg Pro Leu Pro Pro Ser Glu Gly Leu Ser Pro Arg
 210 215 220
 Pro Pro Asn Ser Pro Ser Ile Ser Ile Pro Cys Met Gly Ser Lys Ala
 225 230 235 240
 Ser Ser Pro His Gly Leu Gly Ser Pro Leu Val Ala Ser Pro Arg Leu
 245 250 255
 Glu Lys Arg Leu Gly Gly Leu Ala Pro Gln Arg Gly Ser Arg Ile Ser
 260 265 270
 Val Leu Ser Ala Ser Pro Val Ser Asp Val Ser Tyr Met Phe Gly Ser
 275 280 285
 Ser Gln Ser Leu Leu His Ser Ser Asn Ser Ser His Gln Ser Ser Ser
 290 295 300
 Arg Ser Leu Glu Ser Pro Ala Asn Ser Ser Ser Ser Leu His Ser Leu
 305 310 315 320
 Gly Ser Val Ser Leu Cys Thr Arg Pro Ser Asp Phe Gln Ala Pro Arg
 325 330 335
 Asn Pro Thr Leu Thr Met Gly Gln Pro Arg Thr Pro His Ser Pro Pro
 340 345 350
 Leu Ala Lys Glu His Ala Ser Ile Cys Pro Pro Ser Ile Thr Asn Ser
 355 360 365
 Met Val Asp Ile Pro Ile Val Leu Ile Asn Gly Cys Pro Glu Pro Gly
 370 375 380
 Ser Ser Pro Pro Gln Arg Thr Pro Gly His Gln Asn Ser Val Gln Pro
 385 390 395 400
 Gly Ala Ala Ser Pro Asn Pro Cys Pro Ala Thr Arg Ser Asn Ser
 405 410 415
 Gln Thr Leu Ser Asp Ala Pro Phe Thr Thr Cys Pro Glu Gly Pro Ala
 420 425 430
 Arg Asp Met Gln Pro Thr Met Lys Phe Val Met Asp Thr Ser Lys Tyr
 435 440 445
 Trp Phe Lys Pro Asn Ile Thr Arg Glu Gln Ala Ile Glu Leu Leu Arg
 450 455 460
 Lys Glu Glu Pro Gly Ala Phe Val Ile Arg Asp Ser Ser Ser Tyr Arg
 465 470 475 480
 Gly Ser Phe Gly Leu Ala Leu Lys Val Gln Glu Val Pro Ala Ser Ala
 485 490 495
 Gln Asn Arg Pro Gly Glu Asp Ser Asn Asp Leu Ile Arg His Phe Leu
 500 505 510
 Ile Glu Ser Ser Ala Lys Gly Val His Leu Lys Gly Ala Asp Glu Glu
 515 520 525
 Pro Tyr Phe Gly Ser Leu Ser Ala Phe Val Cys Gln His Ser Ile Met
 530 535 540

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Ala Leu Ala Leu Pro Cys Lys Leu Thr Ile Pro Gln Arg Glu Leu Gly
 545 550 555 560
 Gly Ala Asp Gly Ala Ser Asp Ser Thr Asp Ser Pro Ala Ser Cys Gln
 565 570 575
 Lys Lys Ser Ala Gly Cys His Thr Leu Tyr Leu Ser Ser Val Ser Val
 580 585 590
 Glu Thr Leu Thr Gly Ala Leu Ala Val Gln Lys Ala Ile Ser Thr Thr
 595 600 605
 Phe Glu Arg Asp Ile Leu Pro Thr Pro Thr Val Val His Phe Glu Val
 610 615 620
 Thr Glu Gln Gly Ile Thr Leu Thr Asp Val Gln Arg Lys Val Phe Phe
 625 630 635 640
 Arg Arg His Tyr Pro Leu Thr Thr Leu Arg Phe Cys Gly Met Asp Pro
 645 650 655
 Glu Gln Arg Lys Trp Gln Lys Tyr Cys Lys Pro Ser Trp Ile Phe Gly
 660 665 670
 Phe Val Ala Lys Ser Gln Thr Glu Pro Gln Glu Asn Val Cys His Leu
 675 680 685
 Phe Ala Glu Tyr Asp Met Val Gln Pro Ala Ser Gln Val Ile Gly Leu
 690 695 700
 Val Thr Ala Leu Leu Gln Asp Ala Glu Arg Met
 705 710 715

<210> 99

<211> 35

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 99

ccatatataa aaccactgtc ctgtcctttg tggct

35

<210> 100

<211> 26

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 100

cccccatctg tctgtctata tttgtc

26

<210> 101

<211> 22

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 101

tgccctacgct gacgactatg tg 22
<210> 102

<211> 25
<212> DNA
<213> Artificial sequence

<220>

<223> PCR primer
<400> 102
tttggttttc tacaactggt gctat 25
<210> 103

<211> 19
<212> DNA
<213> Artificial sequence

<220>

<223> PCR primer
<400> 103
gggctccaca caccagatg 19
<210> 104

<211> 21
<212> DNA
<213> Artificial sequence

<220>

<223> PCR primer
<400> 104
acgctctgag caccctctac a 21
<210> 105

<211> 31
<212> DNA
<213> Artificial sequence

<220>

<223> PCR primer
<400> 105
tgtcacaggg actgaaaacc tctcctcatg t 31
<210> 106

<211> 17
<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer
<400> 106
cccaaggcca cgagctt
<210> 107

17

<211> 24

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer
<400> 107
tggtgctctc ttaacgaatc gaaa
<210> 108

24

<211> 29

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer
<400> 108
ctggtcaaac aaactctctg aaccctcc
<210> 109

29

<211> 20

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer
<400> 109
tggtgaggaa aagcggacat
<210> 110

20

<211> 21

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer
<400> 110
ctggcttgga ggacagtgaa g 21
<210> 111

<211> 24

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer
<400> 111
ccaagccctc cccatcccat gtat 24
<210> 112

<211> 21

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer
<400> 112
gaggtgtcgt accgcgttct a 21
<210> 113

<211> 21

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer
<400> 113
ccgttctgct cttccctgct t 21
<210> 114

<211> 23

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer
<400> 114
ccagaccgcg ttcactgacc tgc 23
<210> 115

<211> 20

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 115

cgctgtact tcagcatgga

20

<210> 116

<211> 18

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 116

gcggttcagc tggaggaa

18

<210> 117

<211> 25

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 117

accccgaggc atcaccacaa atcat

25

<210> 118

<211> 23

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 118

agttctgcct ctctgacaac cat

23

<210> 119

<211> 23

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 119

taggctcaga gtcagaccca aac

23

<210> 120

<211> 21

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 120

ccctcgtggg cttgtgctcg g

21

<210> 121

<211> 21

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 121

aagccgccag ttcattctttt t

21

<210> 122

<211> 25

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 122

cttgtggttc aagtcaaag ttcag

25

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<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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<212> DNA

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<212> DNA

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<212> DNA

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<211> 1099

<212> DNA

<213> Homo sapiens

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<210> 337

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<211> 782

<212> DNA

<213> Homo sapiens

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<211> 754

<212> DNA

<213> Homo sapiens

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<210> 339

<211> 1042

<212> DNA

<213> Homo sapiens

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<210> 340

<211> 1020

<212> DNA

<213> Homo sapiens

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<211> 1007

<212> DNA

<213> Homo sapiens

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<211> 953

<212> DNA

<213> Homo sapiens

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<210> 343

<211> 990

<212> DNA

<213> Homo sapiens

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<211> 725

<212> DNA

<213> Homo sapiens

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<211> 1230

<212> DNA

<213> Homo sapiens

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<211> 815

<212> DNA

<213> Homo sapiens

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<211> 1252

<212> DNA

<213> Homo sapiens

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<211> 1621

<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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<211> 1925

<212> DNA

<213> Homo sapiens

<400> 367

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<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<211> 2301

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<213> Homo sapiens

<400> 379

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<212> DNA

<213> Homo sapiens

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<210> 391

<211> 3291

<212> DNA

<213> Homo sapiens

<400> 391

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<210> 392

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<211> 1283

<212> DNA

<213> Homo sapiens

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<400> 392
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<210> 393

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<211> 331

<212> PRT

<213> Homo sapiens

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<400> 393
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20          25          30
Phe Thr Gly Glu Thr Val Ser Leu Val Asp Val Asp Ile Ser Gln Arg
35          40          45

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Gly Leu Thr Ser Pro His Pro Pro Thr Pro Pro Pro Pro Pro Arg Arg
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 Ser Leu Ser Leu Leu Asp Asp Ile Ser Gly Thr Leu Pro Thr Ser Val
 65 70 75 80
 Leu Val Ala Pro Met Gly Ser Ser Leu Gln Ser Phe Pro Leu Pro Pro
 85 90 95
 Pro Pro Pro Pro His Ala Pro Asp Ala Phe Pro Arg Ile Ala Pro Ile
 100 105 110
 Arg Ala Ala Glu Ser Leu His Ser Gln Pro Pro Gln His Leu Gln Cys
 115 120 125
 Pro Leu Tyr Arg Pro Asp Ser Ser Ser Phe Ala Ala Ser Leu Arg Glu
 130 135 140
 Leu Glu Lys Cys Gly Trp Tyr Trp Gly Pro Met Asn Trp Glu Asp Ala
 145 150 155 160
 Glu Met Lys Leu Lys Gly Lys Pro Asp Gly Ser Phe Leu Val Arg Asp
 165 170 175
 Ser Ser Asp Pro Arg Tyr Ile Leu Ser Leu Ser Phe Arg Ser Gln Gly
 180 185 190
 Ile Thr His His Thr Arg Met Glu His Tyr Arg Gly Thr Phe Ser Leu
 195 200 205
 Trp Cys His Pro Lys Phe Glu Asp Arg Cys Gln Ser Val Val Glu Phe
 210 215 220
 Ile Lys Arg Ala Ile Met His Ser Lys Asn Gly Lys Phe Leu Tyr Phe
 225 230 235 240
 Leu Arg Ser Arg Val Pro Gly Leu Pro Pro Thr Pro Val Gln Leu Leu
 245 250 255
 Tyr Pro Val Ser Arg Phe Ser Asn Val Lys Ser Leu Gln His Leu Cys
 260 265 270
 Arg Phe Arg Ile Arg Gln Leu Val Arg Ile Asp His Ile Pro Asp Leu
 275 280 285
 Pro Leu Pro Lys Pro Leu Ile Ser Tyr Ile Arg Lys Phe Tyr Tyr Tyr
 290 295 300
 Asp Pro Gln Glu Glu Val Tyr Leu Ser Leu Lys Glu Ala Gln Leu Ile
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 Ser Lys Gln Lys Gln Glu Val Glu Pro Ser Thr
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<210> 394

<211> 306

<212> PRT

<213> Homo sapiens

<400> 394

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 35 40 45
 Lys Phe Lys Thr Glu Lys Glu Phe Met Gln His Ala Arg Lys Ala Gly
 50 55 60
 Leu Val Ile Pro Pro Glu Lys Ser Asp Arg Ser Ile His Leu Ala Cys
 65 70 75 80
 Thr Ala Gly Ile Phe Asp Ala Tyr Val Pro Pro Glu Gly Asp Ala Arg
 85 90 95
 Ile Ser Ser Leu Ser Lys Glu Gly Leu Ile Glu Arg Thr Glu Arg Met
 100 105 110
 Lys Lys Thr Met Ala Ser Gln Val Ser Ile Arg Arg Ile Lys Asp Tyr
 115 120 125
 Asp Ala Asn Phe Lys Ile Lys Asp Phe Pro Glu Lys Ala Lys Asp Ile
 130 135 140

Phe Ile Glu Ala His Leu Cys Leu Asn Asn Ser Asp His Asp Arg Leu
 145 150 155 160
 His Thr Leu Val Thr Glu His Cys Phe Pro Asp Met Thr Trp Asp Ile
 165 170 175
 Lys Tyr Lys Thr Val Arg Trp Ser Phe Val Glu Ser Leu Glu Pro Ser
 180 185 190
 His Val Val Gln Val Arg Cys Ser Ser Met Met Asn Gln Gly Asn Val
 195 200 205
 Tyr Gly Gln Ile Thr Val Arg Met His Thr Arg Gln Thr Leu Ala Ile
 210 215 220
 Tyr Asp Arg Phe Gly Arg Leu Met Tyr Gly Gln Glu Asp Val Pro Lys
 225 230 235 240
 Asp Val Leu Glu Tyr Val Val Phe Glu Lys Gln Leu Thr Asn Pro Tyr
 245 250 255
 Gly Ser Trp Arg Met His Thr Lys Ile Val Pro Pro Trp Ala Pro Pro
 260 265 270
 Lys Gln Pro Ile Leu Lys Thr Val Met Ile Pro Gly Pro Gln Leu Lys
 275 280 285
 Pro Glu Glu Glu Tyr Glu Glu Ala Gln Gly Glu Ala Gln Lys Pro Gln
 290 295 300
 Leu Ala
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<210> 395

<211> 557

<212> PRT

<213> Homo sapiens

<400> 395

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 35 40 45
 Ser Pro Gly Ser Gly Ala Glu Pro Asp Thr Lys Pro Val Phe His Thr
 50 55 60
 Leu Thr Asn Gly His Ala Lys Gly Arg Leu Ser Gly Asp Glu Gly Ser
 65 70 75 80
 Glu Asp Gly Asp Asp Tyr Asp Thr Pro Pro Ile Leu Lys Glu Leu Gln
 85 90 95
 Ala Leu Asn Thr Glu Glu Ala Ala Glu Gln Arg Ala Glu Val Asp Arg
 100 105 110
 Met Leu Ser Glu Asp Pro Trp Arg Ala Ala Lys Met Ile Lys Gly Tyr
 115 120 125
 Met Gln Gln His Asn Ile Pro Gln Arg Glu Val Val Asp Val Thr Gly
 130 135 140
 Leu Asn Gln Ser His Leu Ser Gln His Leu Asn Lys Gly Thr Pro Met
 145 150 155 160
 Lys Thr Gln Lys Arg Ala Ala Leu Tyr Thr Trp Tyr Val Arg Lys Gln
 165 170 175
 Arg Glu Ile Leu Arg Gln Phe Asn Gln Thr Val Gln Ser Ser Gly Asn
 180 185 190
 Met Thr Asp Lys Ser Ser Gln Asp Gln Leu Leu Phe Leu Phe Pro Glu
 195 200 205
 Phe Ser Gln Gln Ser His Gly Pro Gly Gln Ser Asp Asp Ala Cys Ser
 210 215 220
 Glu Pro Thr Asn Lys Lys Met Arg Arg Asn Arg Phe Lys Trp Gly Pro
 225 230 235 240
 Ala Ser Gln Gln Ile Leu Tyr Gln Ala Tyr Asp Arg Gln Lys Asn Pro
 245 250 255

Ser Lys Glu Glu Arg Glu Ala Leu Val Glu Glu Cys Asn Arg Ala Glu
 260 265 270
 Cys Leu Gln Arg Gly Val Ser Pro Ser Lys Ala His Gly Leu Gly Ser
 275 280 285
 Asn Leu Val Thr Glu Val Arg Val Tyr Asn Trp Phe Ala Asn Arg Arg
 290 295 300
 Lys Glu Glu Ala Phe Arg Gln Lys Leu Ala Met Asp Ala Tyr Ser Ser
 305 310 315 320
 Asn Gln Thr His Ser Leu Asn Pro Leu Leu Ser His Gly Ser Pro His
 325 330 335
 His Gln Pro Ser Ser Pro Pro Asn Lys Leu Ser Gly Val Arg Tyr
 340 345 350
 Ser Gln Gln Gly Asn Asn Glu Ile Thr Ser Ser Ser Thr Ile Ser His
 355 360 365
 His Gly Asn Ser Ala Met Val Thr Ser Gln Ser Val Leu Gln Gln Val
 370 375 380
 Ser Pro Ala Ser Leu Asp Pro Gly His Asn Leu Leu Ser Pro Asp Gly
 385 390 395 400
 Lys Met Ile Ser Val Ser Gly Gly Gly Leu Pro Pro Val Ser Thr Leu
 405 410 415
 Thr Asn Ile His Ser Leu Ser His His Asn Pro Gln Gln Ser Gln Asn
 420 425 430
 Leu Ile Met Thr Pro Leu Ser Gly Val Met Ala Ile Ala Gln Ser Leu
 435 440 445
 Asn Thr Ser Gln Ala Gln Ser Val Pro Val Ile Asn Ser Val Ala Gly
 450 455 460
 Ser Leu Ala Ala Leu Gln Pro Val Gln Phe Ser Gln Gln Leu His Ser
 465 470 475 480
 Pro His Gln Gln Pro Leu Met Gln Gln Ser Pro Gly Ser His Met Ala
 485 490 495
 Gln Gln Pro Phe Met Ala Ala Val Thr Gln Leu Gln Asn Ser His Met
 500 505 510
 Tyr Ala His Lys Gln Glu Pro Pro Gln Tyr Ser His Thr Ser Arg Phe
 515 520 525
 Pro Ser Ala Met Val Val Thr Asp Thr Ser Ser Ile Ser Thr Leu Thr
 530 535 540
 Asn Met Ser Ser Ser Lys Gln Cys Pro Leu Gln Ala Trp
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<210> 396

<211> 491

<212> PRT

<213> Homo sapiens

<400> 396

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 Asn Phe Leu Arg Asn Lys His Lys Ile His Val Gln Gly Thr Asp Leu
 35 40 45
 Pro Asp Pro Ile Ala Thr Phe Gln Gln Leu Asp Gln Glu Tyr Lys Ile
 50 55 60
 Asn Ser Arg Leu Leu Gln Asn Ile Leu Asp Ala Gly Phe Gln Met Pro
 65 70 75 80
 Thr Pro Ile Gln Met Gln Ala Ile Pro Val Met Leu His Gly Arg Glu
 85 90 95
 Leu Leu Ala Ser Ala Pro Thr Gly Ser Gly Lys Thr Leu Ala Phe Ser
 100 105 110
 Ile Pro Ile Leu Met Gln Leu Lys Gln Pro Ala Asn Lys Gly Phe Arg
 115 120 125

Ala Leu Ile Ile Ser Pro Thr Arg Glu Leu Ala Ser Gln Ile His Arg
 130 135 140
 Glu Leu Ile Lys Ile Ser Glu Gly Thr Gly Phe Arg Ile His Met Ile
 145 150 155 160
 His Lys Ala Ala Val Ala Ala Lys Lys Phe Gly Pro Lys Ser Ser Lys
 165 170 175
 Lys Phe Asp Ile Leu Val Thr Thr Pro Asn Arg Leu Ile Tyr Leu Leu
 180 185 190
 Lys Gln Asp Pro Pro Gly Ile Asp Leu Ala Ser Val Glu Trp Leu Val
 195 200 205
 Val Asp Glu Ser Asp Lys Leu Phe Glu Asp Gly Lys Thr Gly Phe Arg
 210 215 220
 Asp Gln Leu Ala Ser Ile Phe Leu Ala Cys Thr Ser His Lys Val Arg
 225 230 235 240
 Arg Ala Met Phe Ser Ala Thr Phe Ala Tyr Asp Val Glu Gln Trp Cys
 245 250 255
 Lys Leu Asn Leu Asp Asn Val Ile Ser Val Ser Ile Gly Ala Arg Asn
 260 265 270
 Ser Ala Val Glu Thr Val Glu Gln Glu Leu Leu Phe Val Gly Ser Glu
 275 280 285
 Thr Gly Lys Leu Leu Ala Val Arg Glu Leu Val Lys Lys Gly Phe Asn
 290 295 300
 Pro Pro Val Leu Val Phe Val Gln Ser Ile Glu Arg Ala Lys Glu Leu
 305 310 315 320
 Phe His Glu Leu Ile Tyr Glu Gly Ile Asn Val Asp Val Ile His Ala
 325 330 335
 Glu Arg Thr Gln Gln Gln Arg Asp Asn Thr Val His Ser Phe Arg Ala
 340 345 350
 Gly Lys Ile Trp Val Leu Ile Cys Thr Ala Leu Leu Ala Arg Gly Ile
 355 360 365
 Asp Phe Lys Gly Val Asn Leu Val Ile Asn Tyr Asp Phe Pro Thr Ser
 370 375 380
 Ser Val Glu Tyr Ile His Arg Ile Gly Arg Thr Gly Arg Ala Gly Asn
 385 390 395 400
 Lys Gly Lys Ala Ile Thr Phe Phe Thr Glu Asp Asp Lys Pro Leu Leu
 405 410 415
 Arg Ser Val Ala Asn Val Ile Gln Gln Ala Gly Cys Pro Val Pro Glu
 420 425 430
 Tyr Ile Lys Gly Phe Gln Lys Leu Leu Ser Lys Gln Lys Lys Lys Met
 435 440 445
 Ile Lys Lys Pro Leu Glu Arg Glu Ser Ile Ser Thr Thr Pro Lys Cys
 450 455 460
 Phe Leu Glu Lys Ala Lys Asp Lys Gln Arg Lys Val Thr Gly Gln Asn
 465 470 475 480
 Ser Lys Lys Lys Val Ala Leu Glu Asp Lys Ser
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<210> 397

<211> 424

<212> PRT

<213> Homo sapiens

<400> 397

Met Asp Phe Ser Arg Arg Ser Phe His Arg Ser Leu Ser Ser Ser Leu
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 20 25 30
 Pro Ser Val Tyr Gly Gly Ala Gly Gly Arg Gly Ile Arg Ile Ser Asn
 35 40 45
 Ser Arg His Thr Val Asn Tyr Gly Ser Asp Leu Thr Gly Gly Gly Asp
 50 55 60

Leu Phe Val Gly Asn Glu Lys Met Ala Met Gln Asn Leu Asn Asp Arg
 65 70 75 80
 Leu Ala Ser Tyr Leu Glu Lys Val Arg Thr Leu Glu Gln Ser Asn Ser
 85 90 95
 Lys Leu Glu Val Gln Ile Lys Gln Trp Tyr Glu Thr Asn Ala Pro Arg
 100 105 110
 Ala Gly Arg Asp Tyr Ser Ala Tyr Arg Gln Ile Glu Glu Leu Arg
 115 120 125
 Ser Gln Ile Lys Asp Ala Gln Leu Gln Asn Ala Arg Cys Val Leu Gln
 130 135 140
 Ile Asp Asn Ala Lys Leu Ala Ala Glu Asp Phe Arg Leu Lys Tyr Glu
 145 150 155 160
 Thr Glu Arg Gly Ile Arg Leu Thr Val Glu Ala Asp Leu Gln Gly Leu
 165 170 175
 Asn Lys Val Phe Asp Asp Leu Thr Leu His Lys Thr Asp Leu Glu Ile
 180 185 190
 Gln Ile Glu Glu Leu Asn Lys Asp Leu Ala Leu Leu Lys Lys Glu His
 195 200 205
 Gln Glu Glu Val Asp Gly Leu His Lys His Leu Gly Asn Thr Val Asn
 210 215 220
 Val Glu Val Asp Ala Ala Pro Gly Leu Asn Leu Gly Val Ile Met Asn
 225 230 235 240
 Glu Met Arg Gln Lys Tyr Glu Val Met Ala Gln Lys Asn Leu Gln Glu
 245 250 255
 Ala Lys Glu Gln Phe Glu Arg Gln Thr Ala Val Leu Gln Gln Gln Val
 260 265 270
 Thr Val Asn Thr Glu Glu Leu Lys Gly Thr Glu Val Gln Leu Thr Glu
 275 280 285
 Leu Arg Arg Thr Ser Gln Ser Leu Glu Ile Glu Leu Gln Ser His Leu
 290 295 300
 Ser Met Lys Glu Ser Leu Glu His Thr Leu Glu Glu Thr Lys Ala Arg
 305 310 315 320
 Tyr Ser Ser Gln Leu Ala Asn Leu Gln Ser Leu Leu Ser Ser Leu Glu
 325 330 335
 Ala Gln Leu Met Gln Ile Arg Ser Asn Met Glu Arg Gln Asn Asn Glu
 340 345 350
 Tyr His Ile Leu Leu Asp Ile Lys Thr Arg Leu Glu Gln Glu Ile Ala
 355 360 365
 Thr Tyr Arg Arg Leu Leu Glu Gly Glu Asp Val Lys Thr Thr Glu Tyr
 370 375 380
 Gln Leu Ser Thr Leu Glu Glu Arg Asp Ile Lys Lys Thr Arg Lys Ile
 385 390 395 400
 Lys Thr Val Val Gln Glu Val Val Asp Gly Lys Val Val Ser Ser Glu
 405 410 415
 Val Lys Glu Val Glu Glu Asn Ile
 420

<210> 398

<211> 209

<212> PRT

<213> Homo sapiens

<400> 398

Met Glu Lys His His Val Pro Ser Asp Phe Asn Val Asn Val Lys Val
 1 5 10 15
 Asp Thr Gly Pro Arg Glu Asp Leu Ile Lys Val Leu Glu Asp Met Arg
 20 25 30
 Gln Glu Tyr Glu Leu Ile Ile Lys Lys His Arg Asp Leu Asp Thr
 35 40 45
 Trp Tyr Lys Glu Gln Ser Ala Ala Met Ser Gln Glu Ala Ala Ser Pro
 50 55 60

Ala Thr Val Gln Ser Arg Gln Gly Asp Ile His Glu Leu Lys Arg Thr
65 70 75 80
Phe Gln Ala Leu Glu Ile Asp Leu Gln Thr Gln Tyr Ser Thr Lys Ser
85 90 95
Ala Leu Glu Asn Met Leu Ser Glu Thr Gln Ser Arg Tyr Ser Cys Lys
100 105 110
Leu Gln Asp Met Gln Glu Ile Ile Ser His Tyr Glu Glu Leu Thr
115 120 125
Gln Leu Arg His Glu Leu Glu Arg Gln Asn Asn Glu Tyr Gln Val Leu
130 135 140
Leu Gly Ile Lys Thr His Leu Glu Lys Glu Ile Thr Thr Tyr Arg Arg
145 150 155 160
Leu Leu Glu Gly Glu Ser Glu Gly Thr Arg Glu Glu Ser Lys Ser Ser
165 170 175
Met Lys Val Ser Ala Thr Pro Lys Ile Lys Ala Ile Thr Gln Glu Thr
180 185 190
Ile Asn Gly Arg Leu Val Leu Cys Gln Val Asn Glu Ile Gln Lys His
195 200 205
Ala

<210> 399

<211> 98

<212> PRT

<213> Homo sapiens

<400> 399

Met Asp Cys Cys Ala Ser Arg Gly Cys Ser Val Pro Thr Gly Pro Ala
1 5 10 15
Thr Thr Ile Cys Ser Ser Asp Lys Ser Cys Arg Cys Gly Val Cys Leu
20 25 30
Pro Ser Thr Cys Pro His Thr Val Trp Leu Leu Glu Pro Thr Cys Cys
35 40 45
Asp Asn Cys Pro Pro Pro Cys His Ile Pro Gln Pro Cys Val Pro Thr
50 55 60
Cys Phe Leu Leu Asn Ser Cys Gln Pro Thr Pro Gly Leu Glu Thr Leu
65 70 75 80
Asn Leu Thr Thr Phe Thr Gln Pro Cys Cys Glu Pro Cys Leu Pro Arg
85 90 95
Gly Cys

<210> 400

<211> 98

<212> PRT

<213> Homo sapiens

<400> 400

Met Asp Cys Cys Ala Ser Arg Ser Cys Ser Val Pro Thr Gly Pro Ala
1 5 10 15
Thr Thr Ile Cys Ser Ser Asp Lys Ser Cys Arg Cys Gly Val Cys Leu
20 25 30
Pro Ser Thr Cys Pro His Thr Val Trp Leu Leu Glu Pro Ile Cys Cys
35 40 45
Asp Asn Cys Pro Pro Pro Cys His Ile Pro Gln Pro Cys Val Pro Thr
50 55 60
Cys Phe Leu Leu Asn Ser Cys Gln Pro Thr Pro Gly Leu Glu Thr Leu
65 70 75 80

<213> Homo sapiens

Met	Ser	Cys	Cys	Asp	Ser	Tyr	Leu	Gln	Gly	Cys	Cys	Ser	Val	Pro	Thr
1				5					10					15	
Gly	Leu	Ala	Thr	Thr	Ile	Cys	Pro	Ser	Asp	Ile	Ser	Cys	Gln	Cys	Glu
			20					25					30		
Val	Cys	Leu	Pro	Ser	Thr	Cys	Pro	His	Glu	Ile	Ser	Leu	Gln	Pro	
		35					40					45			
Thr	Cys	Cys	Glu	Pro	Gly	Pro	Cys	Leu	Ala	Ala	Cys	Leu	Thr	Pro	Met
		50				55					60				
Cys	His	Pro	Val	Asp	Cys	Ser	Thr	Asn	Ala	Thr	Gln	Leu	Gln	Pro	
65					70					75					

<213> Homo sapiens

Met	Tyr	Cys	Cys	Ala	Leu	Arg	Ser	Cys	Ser	Val	Pro	Thr	Gly	Pro	Ala
1				5					10					15	
Thr	Thr	Phe	Cys	Ser	Phe	Asp	Lys	Ser	Cys	Arg	Cys	Gly	Val	Cys	Leu
		20					25					30			
Pro	Ser	Thr	Cys	Pro	His	Glu	Ile	Ser	Leu	Leu	Gln	Pro	Ile	Cys	Cys
		35					40					45			
Asp	Thr	Cys	Pro	Pro	Pro	Cys	Cys	Lys	Pro	Asp	Thr	Tyr	Val	Pro	Thr
		50				55					60				
Cys	Trp	Leu	Leu	Asn	Asn	Cys	His	Pro	Thr	Pro	Gly	Leu	Ser	Gly	Ile
65				70						75				80	
Asn	Leu	Thr	Thr	Tyr	Val	Gln	Pro	Gly	Cys	Glu	Ser	Pro	Cys	Glu	Pro
				85					90					95	

<213> Homo sapiens

Met Thr Cys Cys Gln Thr Ser Phe Cys Gly Tyr Pro Ser Phe Ser Ile
1 5 10 15
Ser Gly Thr Cys Gly Ser Ser Cys Cys Gln Pro Ser Cys Cys Glu Thr
20 25 30

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Ser Cys Cys Gln Pro Arg Ser Cys Gln Thr Ser Phe Cys Gly Phe Pro
      35      40      45
Ser Phe Ser Thr Ser Gly Thr Cys Ser Ser Ser Cys Cys Gln Pro Ser
      50      55      60
Cys Cys Glu Thr Ser Cys Cys Gln Pro Ser Cys Cys Glu Thr Ser Cys
      65      70      75      80
Cys Gln Pro Ser Cys Cys Gln Ile Ser Ser Cys Gly Thr Gly Cys Gly
      85      90      95
Ile Gly Gly Gly Ile Ser Tyr Gly Gln Glu Gly Ser Ser Gly Ala Val
      100      105      110
Ser Thr Arg Ile Arg Trp Cys Arg Pro Asp Ser Arg Val Glu Gly Thr
      115      120      125
Tyr Leu Pro Pro Cys Cys Val Val Ser Cys Thr Pro Pro Ser Cys Cys
      130      135      140
Gln Leu His His Ala Gln Ala Ser Cys Cys Arg Pro Ser Tyr Cys Gly
      145      150      155      160
Gln Ser Cys Cys Arg Pro Val Cys Cys Cys Glu Pro Thr Cys
      165      170

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<210> 404

<211> 167

<212> PRT

<213> Homo sapiens

<400> 404

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Met Thr Cys Cys Gln Thr Ser Phe Cys Gly Tyr Pro Ser Cys Ser Thr
1      5      10      15
Ser Gly Thr Cys Gly Ser Ser Cys Cys Gln Pro Ser Cys Cys Glu Thr
      20      25      30
Ser Cys Cys Gln Pro Ser Cys Cys Gln Thr Ser Phe Cys Gly Phe Pro
      35      40      45
Ser Phe Ser Thr Ser Gly Thr Cys Ser Ser Ser Cys Cys Gln Pro Ser
      50      55      60
Cys Cys Glu Thr Ser Cys Cys Gln Pro Ser Cys Cys Gln Thr Ser Ser
      65      70      75      80
Cys Gly Thr Gly Cys Gly Ile Gly Gly Gly Ile Gly Tyr Gly Gln Glu
      85      90      95
Gly Ser Ser Gly Ala Val Ser Thr Arg Ile Arg Trp Cys Arg Pro Asp
      100      105      110
Cys Arg Val Glu Gly Thr Cys Leu Pro Pro Cys Cys Val Val Ser Cys
      115      120      125
Thr Pro Pro Thr Cys Cys Gln Leu His His Ala Glu Ala Ser Cys Cys
      130      135      140
Arg Pro Ser Tyr Cys Gly Gln Ser Cys Cys Arg Pro Val Cys Cys Cys
      145      150      155      160
Tyr Ser Cys Glu Pro Thr Cys
      165

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<210> 405

<211> 177

<212> PRT

<213> Homo sapiens

<400> 405

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Met Ala Cys Cys Gln Thr Ser Phe Cys Gly Phe Pro Ser Cys Ser Thr
1      5      10      15
Ser Gly Thr Cys Gly Ser Ser Cys Cys Gln Pro Ser Cys Cys Glu Thr
      20      25      30

```

Ser Ser Cys Gln Pro Arg Cys Cys Glu Thr Ser Cys Cys Gln Pro Ser
 35 40 45
 Cys Cys Gln Thr Ser Phe Cys Gly Phe Pro Ser Phe Ser Thr Gly Gly
 50 55 60
 Thr Cys Asp Ser Ser Cys Cys Gln Pro Ser Cys Cys Glu Thr Ser Cys
 65 70 75 80
 Cys Gln Pro Ser Cys Tyr Gln Thr Ser Ser Cys Gly Thr Gly Cys Gly
 85 90 95
 Ile Gly Gly Gly Ile Gly Tyr Gly Gln Glu Gly Ser Ser Gly Ala Val
 100 105 110
 Ser Thr Arg Ile Arg Trp Cys Arg Pro Asp Cys Arg Val Glu Gly Thr
 115 120 125
 Cys Leu Pro Pro Cys Cys Val Val Ser Cys Thr Pro Pro Ser Cys Cys
 130 135 140
 Gln Leu His His Ala Glu Ala Ser Cys Cys Arg Pro Ser Tyr Cys Gly
 145 150 155 160
 Gln Ser Cys Cys Arg Pro Val Cys Cys Cys Tyr Cys Ser Glu Pro Thr
 165 170 175
 Cys

<210> 406

<211> 85

<212> PRT

<213> Homo sapiens

<400> 406

Val Thr Cys Val Pro Arg Cys Thr Arg Pro Ile Cys Glu Pro Cys Arg
 1 5 10 15
 Arg Pro Val Cys Cys Asp Pro Cys Ser Leu Gln Glu Gly Cys Cys Arg
 20 25 30
 Pro Ile Thr Cys Cys Pro Ser Ser Cys Thr Ala Val Val Cys Arg Pro
 35 40 45
 Cys Cys Trp Ala Thr Thr Cys Cys Gln Pro Val Ser Val Gln Ser Pro
 50 55 60
 Cys Cys Arg Pro Pro Cys Gly Gln Pro Thr Pro Cys Ser Thr Thr Cys
 65 70 75 80
 Arg Thr Ser Ser Cys
 85

<210> 407

<211> 128

<212> PRT

<213> Homo sapiens

<400> 407

Met Thr Gly Ser Cys Cys Gly Ser Thr Leu Ser Ser Leu Ser Tyr Gly
 1 5 10 15
 Gly Gly Cys Cys Gln Pro Cys Cys Cys Arg Asp Pro Cys Cys Cys Arg
 20 25 30
 Pro Val Thr Cys Gln Thr Thr Val Cys Arg Pro Val Thr Cys Val Pro
 35 40 45
 Arg Cys Thr Arg Pro Ile Cys Glu Pro Cys Arg Arg Pro Val Cys Cys
 50 55 60
 Asp Pro Cys Ser Leu Gln Glu Gly Cys Cys Arg Pro Ile Thr Cys Cys
 65 70 75 80
 Pro Ser Ser Cys Thr Ala Val Val Cys Arg Pro Cys Cys Trp Ala Thr
 85 90 95

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Thr Cys Cys Gln Pro Val Ser Val Gln Ser Pro Cys Cys Arg Pro Pro
 100 105 110
 Cys Gly Gln Pro Thr Pro Cys Ser Thr Thr Cys Arg Thr Ser Ser Cys
 115 120 125

<210> 408

<211> 20

<212> PRT

<213> Homo sapiens

<400> 408

Met Glu Thr His Cys Thr Gly Arg Ser Ala Ser Phe Cys Ser Ser Ser
 1 5 10 15
 Ala Ile Leu Ile
 20

<210> 409

<211> 210

<212> PRT

<213> Homo sapiens

<400> 409

Met Val Ser Ser Cys Cys Gly Ser Val Cys Ser Asp Gln Gly Cys Gly
 1 5 10 15
 Gln Val Leu Cys Gln Glu Thr Cys Cys Arg Pro Ser Cys Cys Gln Thr
 20 25 30
 Thr Cys Cys Arg Thr Thr Cys Tyr Arg Pro Ser Cys Cys Val Ser Ser
 35 40 45
 Cys Cys Arg Pro Gln Cys Cys Gln Ser Val Cys Cys Gln Pro Thr Cys
 50 55 60
 Cys Arg Pro Ser Cys Cys Glu Thr Thr Cys Cys His Pro Arg Cys Cys
 65 70 75 80
 Ile Ser Ser Cys Cys Arg Pro Ser Cys Cys Met Ser Ser Cys Cys Lys
 85 90 95
 Pro Gln Cys Cys Gln Ser Val Cys Cys Gln Pro Thr Cys Cys Arg Pro
 100 105 110
 Ser Cys Cys Ile Ser Ser Cys Cys Arg Pro Ser Cys Cys Val Ser Arg
 115 120 125
 Cys Cys Arg Pro Gln Cys Cys Gln Ser Val Cys Cys Gln Pro Thr Cys
 130 135 140
 Cys Arg Pro Ser Cys Cys Ile Ser Ser Cys Cys Arg Pro Ser Cys Cys
 145 150 155 160
 Glu Ser Ser Cys Cys Arg Pro Cys Cys Cys Arg Pro Cys Cys Cys Leu
 165 170 175
 Arg Pro Val Cys Gly Arg Val Ser Cys His Thr Thr Cys Tyr Arg Pro
 180 185 190
 Thr Cys Val Ile Ser Thr Cys Pro Arg Pro Leu Cys Cys Ala Ser Ser
 195 200 205
 Cys Cys
 210

<210> 410

<211> 195

<212> PRT

<213> Homo sapiens

<400> 410
 Met Val Asn Ser Cys Cys Gly Ser Val Cys Ser His Gln Gly Cys Gly
 1 5 10 15
 Gln Asp Leu Cys Gln Glu Thr Cys Cys Arg Pro Ser Cys Cys Glu Thr
 20 25 30
 Thr Cys Cys Arg Thr Thr Tyr Cys Arg Pro Ser Cys Cys Val Ser Ser
 35 40 45
 Cys Cys Arg Pro Gln Cys Cys Gln Ser Val Cys Cys Gln Pro Thr Cys
 50 55 60
 Cys Arg Pro Arg Cys Cys Ile Ser Ser Cys Cys Arg Pro Ser Cys Cys
 65 70 75 80
 Val Ser Ser Cys Cys Lys Pro Gln Cys Cys Gln Ser Met Cys Cys Gln
 85 90 95
 Pro Thr Cys Cys Arg Pro Arg Cys Cys Ile Ser Ser Cys Cys Arg Pro
 100 105 110
 Ser Cys Cys Val Ser Ser Cys Cys Arg Pro Gln Cys Cys Gln Ser Val
 115 120 125
 Cys Cys Gln Pro Thr Cys Cys His Pro Ser Cys Ser Ile Ser Ser Cys
 130 135 140
 Cys Arg Pro Ser Cys Cys Glu Ser Ser Cys Cys Arg Pro Cys Cys Cys
 145 150 155 160
 Leu Arg Pro Val Cys Gly Gly Val Ser Cys His Thr Thr Cys Tyr Arg
 165 170 175
 Pro Thr Cys Val Ile Ser Ser Cys Pro Arg Pro Leu Cys Cys Ala Ser
 180 185 190
 Ser Cys Cys
 195
 <210> 411
 <211> 201
 <212> PRT
 <213> Homo sapiens

<400> 411
 Met Val Asn Ser Cys Cys Gly Ser Val Cys Ser Asp Gln Gly Cys Gly
 1 5 10 15
 Leu Glu Asn Cys Cys Arg Pro Ser Cys Cys Gln Thr Thr Cys Cys Arg
 20 25 30
 Thr Thr Cys Cys Arg Pro Ser Cys Cys Val Ser Ser Cys Cys Arg Pro
 35 40 45
 Gln Cys Cys Gln Ser Val Cys Cys Gln Pro Thr Cys Cys Arg Pro Ser
 50 55 60
 Cys Cys Gln Thr Thr Cys Cys Arg Thr Thr Cys Cys Arg Pro Ser Cys
 65 70 75 80
 Cys Val Ser Ser Cys Cys Arg Pro Gln Cys Cys Gln Ser Val Cys Cys
 85 90 95
 Gln Pro Thr Cys Cys Arg Pro Ser Cys Cys Gln Thr Thr Cys Cys Arg
 100 105 110
 Thr Thr Cys Cys Arg Pro Ser Cys Cys Val Ser Ser Cys Cys Arg Pro
 115 120 125
 Gln Cys Cys Gln Ser Val Cys Cys Gln Pro Thr Cys Cys Arg Pro Ser
 130 135 140
 Cys Cys Ile Ser Ser Ser Cys Cys Pro Ser Cys Cys Glu Ser Ser Cys
 145 150 155 160
 Cys Arg Pro Cys Cys Cys Leu Arg Pro Val Cys Gly Arg Val Ser Cys
 165 170 175
 His Thr Thr Cys Tyr Arg Pro Thr Cys Val Ile Ser Thr Cys Pro Arg
 180 185 190
 Pro Leu Cys Cys Ala Ser Ser Cys Cys
 195 200

<210> 412
 <211> 186
 <212> PRT
 <213> Homo sapiens

<400> 412
 Met Val Ser Ser Cys Cys Gly Ser Val Ser Ser Glu Gln Ser Cys Gly
 1 5 10 15
 Leu Glu Asn Cys Cys Arg Pro Ser Cys Cys Gln Thr Thr Cys Cys Arg
 20 25 30
 Thr Thr Cys Cys Arg Pro Ser Cys Cys Lys Pro Gln Cys Cys Gln Ser
 35 40 45
 Val Cys Tyr Gln Pro Thr Cys Cys His Pro Ser Cys Cys Ile Ser Ser
 50 55 60
 Cys Cys His Pro Tyr Cys Cys Glu Ser Ser Cys Cys Arg Pro Cys Cys
 65 70 75 80
 Cys Arg Pro Ser Cys Cys Gln Thr Thr Cys Cys Arg Thr Thr Cys Cys
 85 90 95
 Arg Thr Thr Cys Cys Cys Pro Ser Cys Cys Val Ser Ser Cys Cys Arg
 100 105 110
 Pro Gln Cys Cys Gln Ser Val Cys Cys Gln Pro Thr Cys Cys Arg Pro
 115 120 125
 Ser Cys Cys Ile Ser Ser Cys Cys His Pro Ser Cys Cys Glu Ser Ser
 130 135 140
 Cys Cys Arg Pro Cys Cys Cys Val Arg Pro Val Cys Gly Arg Val Ser
 145 150 155 160
 Cys His Thr Thr Cys Tyr Arg Pro Thr Cys Val Ile Ser Thr Cys Pro
 165 170 175
 Arg Pro Leu Cys Cys Ala Ser Ser Cys Cys
 180 185

<210> 413
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 413
 Met Val Asn Ser Cys Cys Gly Ser Val Cys Ser Asp Gln Gly Cys Gly
 1 5 10 15
 Leu Glu Asn Cys Cys Arg Pro Ser Tyr Cys Gln Thr Thr Cys Cys Arg
 20 25 30
 Thr Thr Cys Cys Arg Pro Ser Cys Cys Arg Pro Ser Cys Cys Arg Pro
 35 40 45
 Gln Cys Cys Gln Ser Val Cys Cys Gln Pro Thr Cys Cys Cys Pro Ser
 50 55 60
 Tyr Cys Val Ser Ser Cys Cys Arg Pro Gln Cys Cys Gln Thr Thr Arg
 65 70 75 80
 Cys Arg Thr Thr Cys Cys Arg Pro Ser Cys Cys Val Ser Arg Cys Tyr
 85 90 95
 Arg Pro His Cys Gly Gln Ser Leu Cys Cys
 100 105

<210> 414
 <211> 166
 <212> PRT

<213> Homo sapiens

<400> 414

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Met Val Asn Ser Cys Cys Gly Ser Val Cys Ser Asp Gln Gly Cys Gly
1      5      10      15
Leu Glu Asn Cys Cys Arg Pro Ser Tyr Cys Gln Thr Thr Cys Cys Arg
20      25      30
Thr Thr Cys Cys Arg Pro Ser Cys Cys Val Ser Ser Cys Cys Arg Pro
35      40      45
Gln Cys Cys Gln Thr Thr Cys Cys Arg Thr Thr Cys Cys His Pro Ser
50      55      60
Cys Cys Val Ser Ser Cys Cys Arg Pro Gln Cys Cys Gln Ser Val Cys
65      70      75      80
Cys Gln Pro Thr Cys Cys Arg Pro Gln Cys Cys Gln Thr Thr Cys Cys
85      90      95
Arg Thr Thr Cys Cys Arg Pro Ser Cys Cys Arg Pro Gln Cys Cys Gln
100     105     110
Ser Val Cys Cys Gln Pro Thr Cys Cys Cys Pro Ser Tyr Cys Val Ser
115     120     125
Ser Cys Cys Arg Pro Gln Cys Cys Gln Thr Thr Cys Cys Arg Thr Thr
130     135     140
Cys Cys Arg Pro Ser Cys Cys Val Ser Arg Cys Tyr Arg Pro His Cys
145     150     155     160
Gly Gln Ser Leu Cys Cys
165

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<210> 415

<211> 136

<212> PRT

<213> Homo sapiens

<400> 415

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Met Val Asn Ser Cys Cys Gly Ser Val Cys Ser Asp Gln Gly Cys Gly
1      5      10      15
Leu Glu Asn Cys Cys Arg Pro Ser Cys Cys Gln Thr Thr Cys Cys Arg
20      25      30
Thr Thr Cys Cys Arg Pro Ser Cys Cys Val Ser Ser Cys Cys Arg Pro
35      40      45
Gln Cys Cys Gln Ser Val Cys Cys Gln Pro Thr Cys Cys Ser Pro Ser
50      55      60
Cys Cys Gln Thr Thr Cys Cys Arg Thr Thr Cys Cys Arg Pro Ser Cys
65      70      75      80
Cys Val Ser Ser Cys Phe Arg Pro Gln Cys Cys Gln Ser Val Cys Cys
85      90      95
Gln Pro Thr Cys Cys Arg Pro Ser Cys Gly Gln Thr Thr Cys Cys Arg
100     105     110
Thr Thr Cys Tyr Arg Pro Ser Cys Cys Val Ser Thr Cys Cys Arg Pro
115     120     125
Thr Cys Ser Ser Gly Ser Cys Cys
130     135

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<210> 416

<211> 127

<212> PRT

<213> Homo sapiens

<400> 416
 Met Val Asn Ser Cys Cys Gly Ser Val Cys Ser Asp Gln Gly Cys Asp
 1 5 10 15
 Gln Gly Leu Cys Gln Glu Thr Cys Cys Arg Pro Ser Cys Cys Gln Thr
 20 25 30
 Thr Cys Cys Cys Pro Ser Cys Val Val Ser Ser Cys Cys Arg Pro Ser
 35 40 45
 Cys Ser Gln Thr Thr Cys Cys Gln Thr Thr Cys Cys Arg Pro Ser Cys
 50 55 60
 Cys Arg Pro Val Cys Cys Gln Thr Thr Cys Arg Pro Ser Cys Gly Val
 65 70 75 80
 Ser Ser Cys Cys Arg Pro Leu Cys Cys Gln Thr Thr Cys Arg Pro Ser
 85 90 95
 Cys Gly Val Ser Ser Cys Cys Arg Pro Leu Cys Cys Gln Thr Thr Cys
 100 105 110
 Cys Arg Thr Thr Cys Cys Arg Pro Ser Cys Cys Gly Ser Ser Cys
 115 120 125
 <210> 417
 <211> 174
 <212> PRT
 <213> Homo sapiens

<400> 417
 Met Thr His Cys Cys Ser Pro Cys Cys Gln Pro Thr Cys Cys Arg Thr
 1 5 10 15
 Thr Cys Cys Arg Thr Thr Cys Trp Lys Pro Thr Thr Val Thr Thr Cys
 20 25 30
 Ser Ser Thr Pro Cys Cys Gln Pro Ala Cys Cys Val Ser Ser Cys Cys
 35 40 45
 Gln Pro Cys Cys Arg Pro Thr Cys Cys Gln Asn Thr Cys Cys Arg Thr
 50 55 60
 Thr Cys Cys Gln Pro Thr Cys Val Thr Ser Cys Cys Gln Pro Ser Cys
 65 70 75 80
 Cys Ser Thr Pro Cys Cys Gln Pro Thr Cys Cys Gly Ser Ser Cys Cys
 85 90 95
 Gly Gln Thr Ser Cys Gly Ser Ser Cys Gly Gln Ser Ser Ser Cys Ala
 100 105 110
 Pro Val Tyr Cys Arg Arg Thr Cys Tyr Tyr Pro Thr Thr Val Cys Leu
 115 120 125
 Pro Gly Cys Leu Asn Gln Ser Cys Gly Ser Asn Cys Cys Gln Pro Cys
 130 135 140
 Cys Arg Pro Ala Cys Cys Glu Thr Thr Cys Cys Arg Thr Thr Cys Phe
 145 150 155 160
 Gln Pro Thr Cys Val Ser Ser Cys Cys Gln Pro Ser Cys Cys
 165 170
 <210> 418
 <211> 159
 <212> PRT
 <213> Homo sapiens

<400> 418
 Met Thr His Cys Cys Ser Pro Cys Cys Gln Pro Thr Cys Cys Arg Thr
 1 5 10 15
 Thr Cys Trp Gln Pro Thr Thr Val Thr Thr Cys Ser Ser Thr Pro Cys
 20 25 30

Cys Gln Pro Ser Cys Cys Val Ser Ser Cys Cys Gln Pro Cys Cys His
 35 40 45
 Pro Thr Cys Cys Gln Asn Thr Cys Cys Arg Thr Thr Cys Cys Gln Pro
 50 55 60
 Ile Cys Val Thr Ser Cys Cys Gln Pro Ser Cys Cys Ser Thr Pro Cys
 65 70 75 80
 Cys Gln Pro Thr Cys Cys Gly Ser Ser Cys Gly Gln Ser Ser Ser Cys
 85 90 95
 Ala Pro Val Tyr Cys Arg Arg Thr Cys Tyr His Pro Thr Ser Val Cys
 100 105 110
 Leu Pro Gly Cys Leu Asn Gln Ser Cys Gly Ser Asn Cys Cys Gln Pro
 115 120 125
 Cys Cys Arg Pro Ala Cys Cys Glu Thr Thr Cys Cys Arg Thr Thr Cys
 130 135 140
 Phe Gln Pro Thr Cys Val Tyr Ser Cys Cys Gln Pro Ser Cys Cys
 145 150 155
 <210> 419
 <211> 159
 <212> PRT
 <213> Homo sapiens

<400> 419
 Met Thr His Cys Cys Ser Pro Cys Cys Gln Pro Thr Cys Cys Arg Thr
 1 5 10 15
 Thr Cys Trp Lys Pro Thr Thr Val Thr Thr Cys Ser Ser Thr Pro Cys
 20 25 30
 Cys Gln Pro Ser Cys Cys Val Ser Cys Cys Gln Pro Cys Cys Arg
 35 40 45
 Pro Thr Cys Cys Gln Asn Thr Cys Cys Gln Pro Ile Cys Val Thr Ser
 50 55 60
 Cys Cys Gln Pro Ser Cys Cys Ser Thr Pro Cys Cys Gln Pro Thr Cys
 65 70 75 80
 Cys Gly Gln Thr Ser Cys Gly Ser Ser Cys Gly Gln Ser Ser Ser Cys
 85 90 95
 Ala Pro Val Tyr Cys Arg Arg Thr Cys Tyr His Pro Thr Thr Val Cys
 100 105 110
 Leu Pro Gly Cys Leu Asn Gln Ser Cys Gly Ser Ser Cys Cys Gln Pro
 115 120 125
 Cys Cys Arg Pro Ala Cys Cys Glu Thr Thr Cys Cys Arg Thr Thr Cys
 130 135 140
 Phe Gln Pro Thr Cys Val Tyr Ser Cys Cys Gln Pro Ser Cys Cys
 145 150 155
 <210> 420
 <211> 154
 <212> PRT
 <213> Homo sapiens

<400> 420
 Met Thr His Cys Cys Ser Pro Cys Cys Gln Pro Thr Cys Cys Arg Thr
 1 5 10 15
 Thr Cys Cys Arg Thr Thr Cys Trp Lys Pro Thr Thr Val Thr Thr Cys
 20 25 30
 Ser Ser Thr Pro Cys Cys Gln Pro Cys Cys Val Ser Ser Cys Cys
 35 40 45
 Gln Pro Cys Cys Arg Pro Ala Cys Cys Gln Asn Thr Cys Cys Arg Thr
 50 55 60

Thr Cys Cys Gln Pro Thr Cys Leu Ser Ser Cys Cys Gly Gln Thr Ser
 65 70 75 80
 Cys Gly Ser Ser Cys Gly Gln Ser Ser Ser Cys Ala Pro Val Tyr Cys
 85 90 95
 Arg Arg Thr Cys Tyr Tyr Pro Thr Thr Val Cys Leu Pro Gly Cys Leu
 100 105 110
 Asn Gln Ser Cys Gly Ser Ser Cys Cys Gln Pro Cys Cys Arg Pro Ala
 115 120 125
 Cys Cys Glu Thr Thr Cys Cys Arg Thr Thr Cys Phe Gln Pro Thr Cys
 130 135 140
 Val Ser Ser Cys Cys Gln Pro Ser Cys Cys
 145 150
 <210> 421
 <211> 154
 <212> PRT
 <213> Homo sapiens

<400> 421
 Met Thr His Cys Cys Ser Pro Cys Cys Gln Pro Thr Cys Cys Arg Thr
 1 5 10 15
 Thr Cys Cys Arg Thr Thr Cys Trp Lys Pro Thr Thr Val Thr Thr Cys
 20 25 30
 Ser Ser Thr Pro Cys Cys Gln Pro Ser Cys Cys Val Ser Ser Cys Cys
 35 40 45
 Gln Pro Cys Cys Arg Pro Thr Cys Cys Gln Asn Thr Cys Cys Gln Pro
 50 55 60
 Thr Cys Val Thr Ser Cys Cys Gln Pro Ser Cys Cys Ser Thr Pro Cys
 65 70 75 80
 Cys Gln Pro Thr Cys Cys Gly Ser Ser Cys Asp Gln Ser Ser Ser Cys
 85 90 95
 Ala Pro Val Tyr Cys Arg Arg Thr Cys Tyr Tyr Pro Thr Thr Val Cys
 100 105 110
 Leu Pro Gly Cys Leu Asn Gln Ser Cys Gly Ser Asn Cys Cys Gln Pro
 115 120 125
 Cys Cys Arg Pro Ala Cys Cys Glu Thr Thr Cys Phe Gln Pro Thr Cys
 130 135 140
 Val Ser Ser Cys Cys Gln Pro Phe Cys Cys
 145 150
 <210> 422
 <211> 138
 <212> PRT
 <213> Homo sapiens

<400> 422
 Met Leu Gln Asp His Leu Leu Gln Asp Asn Leu Leu Glu Ala His His
 1 5 10 15
 Cys Asp His Leu Gln Gln His Ile Leu Leu Pro Ala Leu Leu Leu Cys
 20 25 30
 Val Gln Leu Leu Pro Ala Leu Leu Pro Pro Asn Leu Leu Ser Lys His
 35 40 45
 Leu Leu Gln Asp His Leu Leu Pro Ala His Leu Cys Asp Gln Leu Leu
 50 55 60
 Pro Ala Phe Leu Leu Gln His Thr Leu Leu Thr Ala His Leu Leu Trp
 65 70 75 80
 Val Gln Leu Leu Trp Pro Asn His Leu Trp Val Gln Leu Leu Pro Ala
 85 90 95

Gln Leu Leu Cys Thr His Leu Leu Gln Glu Asn Leu Leu Pro Pro His
 100 105 110
 Glu Cys Leu Pro Ala Trp Leu Pro Lys Ser Glu Leu Trp Leu Gln Leu
 115 120 125
 Leu Pro Ala Leu Leu Pro Pro Ser Leu Leu
 130 135
 <210> 423
 <211> 409
 <212> PRT
 <213> Homo sapiens

<400> 423
 Met Ser Gly Ser Cys Ser Ser Arg Lys Cys Phe Ser Val Pro Ala Thr
 1 5 10 15
 Ser Leu Cys Ser Thr Glu Val Ser Cys Gly Gly Pro Ile Cys Leu Pro
 20 25 30
 Ser Ser Cys Gln Ser Gln Thr Trp Gln Leu Val Thr Cys Gln Asp Ser
 35 40 45
 Cys Gly Ser Ser Ser Cys Gly Pro Gln Cys Arg Gln Pro Ser Cys Pro
 50 55 60
 Val Ser Ser Cys Ala Gln Pro Leu Cys Cys Asp Pro Val Ile Cys Glu
 65 70 75 80
 Pro Ser Cys Ser Val Ser Ser Gly Cys Gln Pro Val Cys Cys Glu Ala
 85 90 95
 Thr Thr Cys Glu Pro Ser Cys Ser Val Ser Asn Cys Tyr Gln Pro Val
 100 105 110
 Cys Phe Glu Ala Thr Ile Cys Glu Pro Ser Cys Ser Val Ser Asn Cys
 115 120 125
 Cys Gln Pro Val Cys Phe Glu Ala Thr Val Cys Glu Pro Ser Cys Ser
 130 135 140
 Val Ser Ser Cys Ala Gln Pro Val Cys Cys Glu Pro Ala Ile Cys Glu
 145 150 155 160
 Pro Ser Cys Ser Val Ser Ser Cys Cys Gln Pro Val Gly Ser Glu Ala
 165 170 175
 Thr Ser Cys Gln Pro Val Leu Cys Val Pro Thr Ser Cys Gln Pro Val
 180 185 190
 Leu Cys Lys Ser Ser Cys Cys Gln Pro Val Val Cys Glu Pro Ser Cys
 195 200 205
 Cys Ser Ala Val Cys Thr Leu Pro Ser Ser Cys Gln Pro Val Val Cys
 210 215 220
 Glu Pro Ser Cys Cys Gln Pro Val Cys Pro Thr Pro Thr Cys Ser Val
 225 230 235 240
 Thr Ser Ser Cys Gln Ala Val Cys Cys Asp Pro Ser Pro Trp Ser Ser
 245 250 255
 Ala Ser Ala Ile Cys Arg Pro Thr Cys Pro Arg Thr Phe Tyr Ile Pro
 260 265 270
 Ser Ser Ser Lys Arg Pro Cys Ser Ala Thr Ile Ser Tyr Arg Pro Val
 275 280 285
 Ser Arg Pro Ile Cys Arg Pro Ile Cys Ser Gly Leu Leu Thr Tyr Arg
 290 295 300
 Gln Pro Tyr Met Thr Ser Ile Ser Tyr Arg Pro Ala Cys Tyr Arg Pro
 305 310 315 320
 Cys Tyr Ser Ile Leu Arg Arg Pro Ala Cys Val Thr Ser Tyr Ser Cys
 325 330 335
 Arg Pro Val Tyr Phe Arg Pro Ser Cys Thr Glu Ser Asp Ser Cys Lys
 340 345 350
 Arg Asp Cys Lys Lys Ser Thr Ser Ser Gln Leu Asp Cys Val Asp Thr
 355 360 365
 Thr Pro Cys Lys Val Asp Val Ser Glu Glu Ala Pro Cys Gln Pro Thr
 370 375 380

Glu Ala Lys Pro Ile Ser Pro Thr Thr Arg Glu Ala Ala Ala Ala Gln
 385 390 395 400
 Pro Ala Ala Ser Lys Pro Ala Asn Cys
 405

<210> 424

<211> 105

<212> PRT

<213> Homo sapiens

<400> 424
 Met Gly Cys Cys Pro Gly Asp Cys Phe Thr Cys Cys Thr Gln Glu Gln
 1 5 10 15
 Asn Cys Cys Glu Glu Cys Cys Cys Gln Pro Gly Cys Cys Gly Cys Cys
 20 25 30
 Gly Ser Cys Cys Gly Cys Gly Gly Ser Gly Cys Gly Gly Ser Gly Cys
 35 40 45
 Gly Gly Ser Cys Cys Gly Ser Ser Cys Cys Gly Ser Gly Cys Gly Gly
 50 55 60
 Cys Gly Gly Cys Gly Gly Cys Gly Gly Cys Cys Gly Ser Ser Cys
 65 70 75 80
 Cys Gly Ser Ser Cys Cys Gly Ser Gly Cys Cys Gly Pro Val Cys Cys
 85 90 95
 Gln Pro Thr Pro Ile Cys Asp Thr Lys
 100 105

<210> 425

<211> 404

<212> PRT

<213> Homo sapiens

<400> 425
 Met Ser Tyr Ser Cys Gly Leu Pro Ser Leu Ser Cys Arg Thr Ser Cys
 1 5 10 15
 Ser Ser Arg Pro Cys Val Pro Pro Ser Cys His Gly Cys Thr Leu Pro
 20 25 30
 Gly Ala Cys Asn Ile Pro Ala Asn Val Ser Asn Cys Asn Trp Phe Cys
 35 40 45
 Glu Gly Ser Phe Asn Gly Ser Glu Lys Glu Thr Met Gln Phe Leu Asn
 50 55 60
 Asp Arg Leu Ala Ser Tyr Leu Glu Lys Val Arg Gln Leu Glu Arg Asp
 65 70 75 80
 Asn Ala Glu Leu Glu Asn Leu Ile Arg Glu Arg Ser Gln Gln Gln Glu
 85 90 95
 Pro Leu Val Cys Ala Ser Tyr Gln Ser Tyr Phe Lys Thr Ile Glu Glu
 100 105 110
 Leu Gln Gln Lys Ile Leu Cys Ser Lys Ser Glu Asn Ala Arg Leu Val
 115 120 125
 Val Gln Ile Asp Asn Ala Lys Leu Ala Ser Asp Asp Phe Arg Thr Lys
 130 135 140
 Tyr Glu Thr Glu Leu Ser Leu Arg Gln Leu Val Glu Ser Asp Ile Asn
 145 150 155 160
 Gly Leu Arg Arg Ile Leu Asp Glu Leu Thr Leu Cys Arg Ser Asp Leu
 165 170 175
 Glu Ala Gln Val Glu Ser Leu Lys Glu Glu Leu Leu Cys Leu Lys Gln
 180 185 190
 Asn His Glu Gln Glu Val Asn Thr Leu Arg Cys Gln Leu Gly Asp Arg
 195 200 205

Leu Asn Val Glu Val Asp Ala Ala Pro Thr Val Asp Leu Asn Gln Val
 210 215 220
 Leu Asn Glu Thr Arg Ser Gln Tyr Glu Ala Leu Val Glu Thr Asn Arg
 225 230 235 240
 Arg Glu Val Glu Gln Trp Phe Ala Thr Gln Thr Glu Glu Leu Asn Lys
 245 250 255
 Gln Val Val Ser Ser Ser Glu Gln Leu Gln Ser Tyr Gln Ala Glu Ile
 260 265 270
 Ile Glu Leu Arg Arg Thr Val Asn Ala Leu Glu Ile Glu Leu Gln Ala
 275 280 285
 Gln His Asn Leu Arg Asp Ser Leu Glu Asn Thr Leu Thr Glu Ser Glu
 290 295 300
 Ala Arg Tyr Ser Ser Gln Leu Ser Gln Val Gln Arg Leu Ile Thr Asn
 305 310 315 320
 Val Glu Ser Gln Leu Ala Glu Ile Arg Ser Asp Leu Glu Arg Gln Asn
 325 330 335
 Gln Glu Tyr Gln Val Leu Leu Asp Val Arg Ala Arg Leu Glu Cys Glu
 340 345 350
 Ile Asn Thr Tyr Arg Ser Leu Leu Glu Ser Glu Asp Cys Lys Leu Pro
 355 360 365
 Ser Asn Pro Cys Ala Thr Thr Asn Ala Cys Asp Lys Ser Thr Gly Pro
 370 375 380
 Cys Ile Ser Asn Pro Cys Gly Leu Arg Ala Arg Cys Gly Pro Cys Asn
 385 390 395 400
 Thr Phe Gly Tyr

<210> 426

<211> 404

<212> PRT

<213> Homo sapiens

<400> 426

Met Pro Tyr Asn Phe Cys Leu Pro Ser Leu Ser Cys Arg Thr Ser Cys
 1 5 10 15
 Ser Ser Arg Pro Cys Val Pro Pro Ser Cys His Gly Tyr Thr Leu Pro
 20 25 30
 Gly Ala Cys Asn Ile Pro Ala Asn Val Ser Asn Cys Asn Trp Phe Cys
 35 40 45
 Glu Gly Ser Phe Asn Gly Ser Glu Lys Glu Thr Met Gln Phe Leu Asn
 50 55 60
 Asp Arg Leu Ala Ser Tyr Leu Glu Lys Val Arg Gln Leu Glu Arg Asp
 65 70 75 80
 Asn Ala Glu Leu Glu Asn Leu Ile Arg Glu Arg Ser Gln Gln Gln Glu
 85 90 95
 Pro Leu Leu Cys Pro Ser Tyr Gln Ser Tyr Phe Lys Thr Ile Glu Glu
 100 105 110
 Leu Gln Gln Lys Ile Leu Cys Ser Lys Ser Glu Asn Ala Arg Leu Val
 115 120 125
 Val Gln Ile Asp Asn Ala Lys Leu Ala Ala Asp Asp Phe Arg Thr Lys
 130 135 140
 Tyr Gln Thr Glu Gln Ser Leu Arg Gln Leu Val Glu Ser Asp Ile Asn
 145 150 155 160
 Ser Leu Arg Arg Ile Leu Asp Glu Leu Thr Leu Cys Arg Ser Asp Leu
 165 170 175
 Glu Ala Gln Met Glu Ser Leu Lys Glu Glu Leu Leu Ser Leu Lys Gln
 180 185 190
 Asn His Glu Gln Glu Val Asn Thr Leu Arg Cys Gln Leu Gly Asp Arg
 195 200 205
 Leu Asn Val Glu Val Asp Ala Ala Pro Ala Val Asp Leu Asn Gln Val
 210 215 220

Leu Asn Glu Thr Arg Asn Gln Tyr Glu Ala Leu Val Glu Thr Asn Arg
 225 230 235 240
 Arg Glu Val Glu Gln Trp Phe Ala Thr Gln Thr Glu Glu Leu Asn Lys
 245 250 255
 Gln Val Val Ser Ser Ser Glu Gln Leu Gln Ser Tyr Gln Ala Glu Ile
 260 265 270
 Ile Glu Leu Arg Arg Thr Val Asn Ala Leu Glu Ile Glu Leu Gln Ala
 275 280 285
 Gln His Asn Leu Arg Tyr Ser Leu Glu Asn Thr Leu Thr Glu Ser Glu
 290 295 300
 Ala Arg Tyr Ser Ser Gln Leu Ser Gln Val Gln Ser Leu Ile Thr Asn
 305 310 315 320
 Val Glu Ser Gln Leu Ala Glu Ile Arg Ser Asp Leu Glu Arg Gln Asn
 325 330 335
 Gln Glu Tyr Gln Val Leu Leu Asp Val Arg Ala Arg Leu Glu Cys Glu
 340 345 350
 Ile Asn Thr Tyr Arg Ser Leu Leu Glu Ser Glu Asp Cys Lys Leu Pro
 355 360 365
 Ser Asn Pro Cys Ala Thr Thr Asn Ala Cys Glu Lys Pro Ile Gly Ser
 370 375 380
 Cys Val Thr Asn Pro Cys Gly Pro Arg Ser Arg Cys Gly Pro Cys Asn
 385 390 395 400
 Thr Phe Gly Tyr

<210> 427

<211> 436

<212> PRT

<213> Homo sapiens

<400> 427

Met Leu Tyr Ala Lys Pro Pro Pro Thr Ile Asn Gly Ile Lys Gly Leu
 1 5 10 15
 Gln Arg Lys Glu Arg Leu Lys Pro Ala His Ile His Leu Gln Gln Leu
 20 25 30
 Thr Cys Phe Ser Ile Thr Cys Ser Thr Met Ser Tyr Ser Cys Cys
 35 40 45
 Leu Pro Ser Leu Gly Cys Arg Thr Ser Cys Ser Ser Arg Pro Cys Val
 50 55 60
 Pro Pro Ser Cys His Gly Tyr Thr Leu Pro Gly Ala Cys Asn Ile Pro
 65 70 75 80
 Ala Asn Val Ser Asn Cys Asn Trp Phe Cys Glu Gly Ser Phe Asn Gly
 85 90 95
 Ser Glu Lys Glu Thr Met Gln Phe Leu Asn Asp Arg Leu Ala Ser Tyr
 100 105 110
 Leu Glu Lys Val Arg Gln Leu Glu Arg Asp Asn Ala Glu Leu Glu Lys
 115 120 125
 Leu Ile Gln Glu Arg Ser Gln Gln Gln Glu Pro Leu Leu Cys Pro Ser
 130 135 140
 Tyr Gln Ser Tyr Phe Lys Thr Ile Glu Glu Leu Gln Gln Lys Ile Leu
 145 150 155 160
 Cys Ala Lys Ala Glu Asn Ala Arg Leu Val Val Asn Ile Asp Asn Ala
 165 170 175
 Lys Leu Ala Ser Asp Asp Phe Arg Ser Lys Tyr Gln Thr Glu Gln Ser
 180 185 190
 Leu Arg Leu Leu Val Glu Ser Asp Ile Asn Ser Ile Arg Arg Ile Leu
 195 200 205
 Asp Glu Leu Thr Leu Cys Lys Ser Asp Leu Glu Ser Gln Val Glu Ser
 210 215 220
 Leu Arg Glu Glu Leu Ile Cys Leu Lys Lys Asn His Glu Glu Glu Val
 225 230 235 240

Asn Thr Leu Arg Ser Gln Leu Gly Asp Arg Leu Asn Val Glu Val Asp
 245 250 255
 Thr Ala Pro Thr Val Asp Leu Asn Gln Val Leu Asn Glu Thr Arg Ser
 260 265 270
 Gln Tyr Glu Ala Leu Val Glu Ile Asn Arg Arg Glu Val Glu Gln Trp
 275 280 285
 Phe Ala Thr Gln Thr Glu Glu Leu Asn Lys Gln Val Val Ser Ser Ser
 290 295 300
 Glu Gln Leu Gln Ser Cys Gln Ala Glu Ile Ile Glu Leu Arg Arg Thr
 305 310 315 320
 Val Asn Ala Leu Glu Ile Glu Leu Gln Ala Gln His Asn Leu Arg Asp
 325 330 335
 Ser Leu Glu Asn Thr Leu Thr Glu Ser Glu Ala His Tyr Ser Ser Gln
 340 345 350
 Leu Ser Gln Val Gln Ser Leu Ile Thr Asn Val Glu Ser Gln Leu Ala
 355 360 365
 Glu Ile Arg Cys Asp Leu Glu Arg Gln Asn Gln Glu Tyr Gln Val Leu
 370 375 380
 Leu Asp Val Arg Ala Arg Leu Glu Cys Glu Ile Asn Thr Tyr Arg Ser
 385 390 395 400
 Leu Leu Glu Ser Glu Asp Cys Lys Leu Pro Cys Asn Pro Cys Ala Thr
 405 410 415
 Thr Asn Ala Ser Gly Asn Ser Cys Gly Pro Cys Gly Thr Ser Gln Lys
 420 425 430
 Gly Cys Cys Asn
 435
 <210> 428

 <211> 416

 <212> PRT

 <213> Homo sapiens

<400> 428
 Met Pro Tyr Asn Phe Cys Leu Pro Ser Leu Ser Cys Arg Thr Ser Cys
 1 5 10 15
 Ser Ser Arg Pro Cys Val Pro Pro Ser Cys His Ser Cys Thr Leu Pro
 20 25 30
 Gly Ala Cys Asn Ile Pro Ala Asn Val Ser Asn Cys Asn Trp Phe Cys
 35 40 45
 Glu Gly Ser Phe Asn Gly Ser Glu Lys Glu Thr Met Gln Phe Leu Asn
 50 55 60
 Asp Arg Leu Ala Ser Tyr Leu Glu Lys Val Arg Gln Leu Glu Arg Asp
 65 70 75 80
 Asn Ala Glu Leu Glu Asn Leu Ile Arg Glu Arg Ser Gln Gln Gln Glu
 85 90 95
 Pro Leu Leu Cys Pro Ser Tyr Gln Ser Tyr Phe Lys Thr Ile Glu Glu
 100 105 110
 Leu Gln Gln Lys Ile Leu Cys Thr Lys Ser Glu Asn Ala Arg Leu Val
 115 120 125
 Val Gln Ile Asp Asn Ala Lys Leu Ala Ala Asp Asp Phe Arg Thr Lys
 130 135 140
 Tyr Gln Thr Glu Leu Ser Leu Arg Gln Leu Val Glu Ser Asp Ile Asn
 145 150 155 160
 Gly Leu Arg Arg Ile Leu Asp Glu Leu Thr Leu Cys Lys Ser Asp Leu
 165 170 175
 Glu Ala Gln Val Glu Ser Leu Lys Glu Glu Leu Leu Cys Leu Lys Ser
 180 185 190
 Asn His Glu Gln Glu Val Asn Thr Leu Arg Cys Gln Leu Gly Asp Arg
 195 200 205
 Leu Asn Val Glu Val Asp Ala Pro Thr Val Asp Leu Asn Arg Val
 210 215 220

Leu Asn Glu Thr Arg Ser Gln Tyr Glu Ala Leu Val Glu Thr Asn Arg
 225 230 235 240
 Arg Glu Val Glu Gln Trp Phe Thr Thr Gln Thr Glu Glu Leu Asn Lys
 245 250 255
 Gln Val Val Ser Ser Ser Glu Gln Leu Gln Ser Tyr Gln Ala Glu Ile
 260 265 270
 Ile Glu Leu Arg Arg Thr Val Asn Ala Leu Glu Ile Glu Leu Gln Ala
 275 280 285
 Gln His Asn Leu Arg Asp Ser Leu Glu Asn Thr Leu Thr Glu Ser Glu
 290 295 300
 Ala Arg Tyr Ser Ser Gln Leu Ser Gln Val Gln Ser Leu Ile Thr Asn
 305 310 315 320
 Val Glu Ser Gln Leu Ala Glu Ile Arg Ser Asp Leu Glu Arg Gln Asn
 325 330 335
 Gln Glu Tyr Gln Val Leu Leu Asp Val Arg Ala Arg Leu Glu Cys Glu
 340 345 350
 Ile Asn Thr Tyr Arg Ser Leu Leu Glu Ser Glu Asp Cys Asn Leu Pro
 355 360 365
 Ser Asn Pro Cys Ala Thr Thr Asn Ala Cys Ser Lys Pro Ile Gly Pro
 370 375 380
 Cys Leu Ser Asn Pro Cys Thr Ser Cys Val Pro Pro Ala Pro Cys Thr
 385 390 395 400
 Pro Cys Ala Pro Arg Pro Arg Cys Gly Pro Cys Asn Ser Phe Val Arg
 405 410 415
 <210> 429
 <211> 201
 <212> PRT
 <213> Homo sapiens

<400> 429
 Met Thr Ser Asp His Cys Ser Ser Leu Leu Ser Gly Gln Val Ser Glu
 1 5 10 15
 Ala Asn Ala Ala Ser Leu Cys Leu Leu Ala Asn Val Ala His Ala Asn
 20 25 30
 Arg Val Arg Val Gly Ser Thr Pro Leu Gly Arg Leu Ser Leu Cys Leu
 35 40 45
 Pro Pro Thr Cys His Thr Thr Cys Pro Leu Pro Gly Thr Cys His Ile
 50 55 60
 Pro Gly Asn Ile Gly Ile Cys Gly Ala Tyr Arg Glu Asn Thr Leu Asn
 65 70 75 80
 Gly His Glu Lys Glu Thr Met Gln Phe Leu Asn Asp Arg Leu Ala Asn
 85 90 95
 Tyr Leu Glu Lys Val Arg Gln Leu Glu Trp Asp Asn Ala Glu Leu Glu
 100 105 110
 Thr Lys Leu His Glu Arg Ser Lys Cys His Glu Ser Ser Val Cys Arg
 115 120 125
 Asn Tyr Gln Ser Tyr Phe Cys Thr Ile Gln Glu Leu Gln Gln Lys Val
 130 135 140
 Arg Phe Ala Val His Gln Ile Arg Gly Gln Glu Ser Ala Tyr Cys Leu
 145 150 155 160
 Ser Ala Lys Ser Gly Pro Pro Pro Ala Phe Ala Asn Lys Val Leu Leu
 165 170 175
 Val His Gly His Ala His Ala Phe Val Cys Cys Leu Gln Leu Leu Leu
 180 185 190
 Tyr Tyr Ser Gly Arg Val Gln Ser Leu
 195 200
 <210> 430
 <211> 471
 <212> PRT

<213> Homo sapiens

<400> 430

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Met Thr Ser Phe Tyr Ser Thr Ser Ser Cys Pro Leu Gly Cys Thr Met
1      5      10      15
Ala Pro Gly Ala Arg Asn Val Phe Val Ser Pro Ile Asp Val Gly Cys
20      25      30
Gln Pro Val Ala Glu Ala Asn Ala Ala Ser Met Cys Leu Leu Ala Asn
35      40      45
Val Ala His Ala Asn Arg Val Arg Val Gly Ser Thr Pro Leu Gly Arg
50      55      60
Pro Ser Leu Cys Leu Pro Pro Thr Ser His Thr Ala Cys Pro Leu Pro
65      70      75      80
Gly Thr Cys His Ile Pro Gly Asn Ile Gly Ile Cys Gly Ala Tyr Gly
85      90      95
Lys Asn Thr Leu Asn Gly His Glu Lys Glu Thr Met Lys Phe Leu Asn
100      105      110
Asp Arg Leu Ala Asn Tyr Leu Glu Lys Val Arg Gln Leu Glu Gln Glu
115      120      125
Asn Ala Glu Leu Glu Thr Thr Leu Leu Glu Arg Ser Lys Cys His Glu
130      135      140
Ser Thr Val Cys Pro Asp Tyr Gln Ser Tyr Phe Arg Thr Ile Glu Glu
145      150      155      160
Leu Gln Gln Lys Ile Leu Cys Ser Lys Ala Glu Asn Ala Arg Leu Ile
165      170      175
Val Gln Ile Asp Asn Ala Lys Leu Ala Ala Asp Asp Phe Arg Ile Lys
180      185      190
Leu Glu Ser Glu Arg Ser Leu His Gln Leu Val Glu Ala Asp Lys Cys
195      200      205
Gly Thr Gln Lys Leu Leu Asp Ala Thr Leu Ala Lys Ala Asp Leu
210      215      220
Glu Ala Gln Gln Glu Ser Leu Lys Glu Glu Gln Leu Ser Leu Lys Ser
225      230      235      240
Asn His Glu Gln Glu Val Lys Ile Leu Arg Ser Gln Leu Gly Glu Lys
245      250      255
Phe Arg Ile Glu Leu Asp Ile Glu Pro Thr Ile Asp Leu Asn Arg Val
260      265      270
Leu Gly Glu Met Arg Ala Gln Tyr Glu Ala Met Val Glu Thr Asn His
275      280      285
Gln Asp Val Glu Gln Trp Phe Gln Ala Gln Ser Glu Gly Ile Ser Leu
290      295      300
Gln Ala Met Ser Cys Ser Glu Glu Leu Gln Cys Cys Gln Ser Glu Ile
305      310      315      320
Leu Glu Leu Arg Cys Thr Val Asn Ala Leu Glu Val Glu Arg Gln Ala
325      330      335
Gln His Thr Leu Lys Asp Cys Leu Gln Asn Ser Leu Cys Glu Ala Glu
340      345      350
Asp Arg Tyr Gly Thr Glu Leu Ala Gln Met Gln Ser Leu Ile Ser Asn
355      360      365
Leu Glu Glu Gln Leu Ser Glu Ile Arg Ala Asp Leu Glu Arg Gln Asn
370      375      380
Gln Glu Tyr Gln Val Leu Leu Asp Val Lys Ala Arg Leu Glu Asn Glu
385      390      395      400
Ile Ala Thr Tyr Arg Asn Leu Thr Pro Leu Gln Ser Leu Phe His Ala
405      410      415
Cys Leu Leu Tyr Phe Leu Ser Lys Leu Trp Pro Cys His Arg Trp Val
420      425      430
Ser Leu Trp Pro Trp Ser Gln His Gly Glu Met Ile Leu Lys Ala Arg
435      440      445
Val Arg Arg Leu Arg Leu Val Ala Leu Gly Ser Gly Val Pro Ser Pro
450      455      460
Cys Pro Val Phe Leu Gln Asp
465      470

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<210> 431
 <211> 456
 <212> PRT
 <213> Homo sapiens

<400> 431
 Met Thr Ser Ser Tyr Ser Ser Ser Ser Cys Pro Leu Gly Cys Thr Met
 1 5 10 15
 Ala Pro Gly Ala Arg Asn Val Ser Val Ser Pro Ile Asp Ile Gly Cys
 20 25 30
 Gln Pro Gly Ala Glu Ala Asn Ile Ala Pro Met Cys Leu Leu Ala Asn
 35 40 45
 Val Ala His Ala Asn Arg Val Arg Val Gly Ser Thr Pro Leu Gly Arg
 50 55 60
 Pro Ser Leu Cys Leu Pro Pro Thr Cys His Thr Ala Cys Pro Leu Pro
 65 70 75 80
 Gly Thr Cys His Ile Pro Gly Asn Ile Gly Ile Cys Gly Ala Tyr Gly
 85 90 95
 Glu Asn Thr Leu Asn Gly His Glu Lys Glu Thr Met Gln Phe Leu Asn
 100 105 110
 Asp Arg Leu Ala Asn Tyr Leu Glu Lys Val Arg Gln Leu Glu Gln Glu
 115 120 125
 Asn Ala Glu Leu Glu Ala Thr Leu Leu Glu Arg Ser Lys Cys His Glu
 130 135 140
 Ser Thr Val Cys Pro Asp Tyr Gln Ser Tyr Phe His Thr Ile Glu Glu
 145 150 155 160
 Leu Gln Gln Lys Ile Leu Cys Ser Lys Ala Glu Asn Ala Arg Leu Ile
 165 170 175
 Val Gln Ile Asp Asn Ala Lys Leu Ala Ala Asp Asp Phe Arg Ile Lys
 180 185 190
 Leu Glu Ser Glu Arg Ser Leu Arg Gln Leu Val Glu Ala Asp Lys Cys
 195 200 205
 Gly Thr Gln Lys Leu Leu Asp Ala Thr Leu Ala Lys Ala Asp Leu
 210 215 220
 Glu Ala Gln Gln Glu Ser Leu Lys Glu Glu Gln Leu Ser Leu Lys Ser
 225 230 235 240
 Asn His Glu Gln Glu Val Lys Ile Leu Arg Ser Gln Leu Gly Glu Lys
 245 250 255
 Leu Arg Ile Glu Leu Asp Ile Glu Pro Thr Ile Asp Leu Asn Arg Val
 260 265 270
 Leu Gly Glu Met Arg Ala Gln Tyr Glu Ala Met Leu Glu Thr Asn Arg
 275 280 285
 Gln Asp Val Glu Gln Trp Phe Gln Ala Gln Ser Glu Gly Ile Ser Leu
 290 295 300
 Gln Asp Met Ser Cys Ser Glu Glu Leu Gln Cys Cys Gln Ser Glu Ile
 305 310 315 320
 Leu Glu Leu Arg Cys Thr Val Asn Ala Leu Glu Val Glu Arg Gln Ala
 325 330 335
 Gln His Thr Leu Lys Asp Cys Leu Gln Asn Ser Leu Cys Glu Ala Glu
 340 345 350
 Asp Arg Phe Gly Thr Glu Leu Ala Gln Met Gln Ser Leu Ile Ser Asn
 355 360 365
 Val Glu Glu Gln Leu Ser Glu Ile Arg Ala Asp Leu Glu Arg Gln Asn
 370 375 380
 Gln Glu Tyr Gln Val Leu Leu Asp Val Lys Thr Arg Leu Glu Asn Glu
 385 390 395 400
 Ile Ala Thr Tyr Arg Asn Leu Leu Glu Ser Glu Asp Cys Lys Leu Pro
 405 410 415
 Cys Asn Pro Cys Ser Thr Ser Pro Ser Cys Val Thr Ala Pro Cys Ala
 420 425 430

Pro Arg Pro Ser Cys Gly Pro Cys Thr Thr Cys Gly Pro Thr Cys Gly
 435 440 445
 Ala Ser Thr Thr Gly Ser Arg Phe
 450 455
 <210> 432
 <211> 448
 <212> . PRT
 <213> Homo sapiens

<400> 432
 Met Thr Ser Ser Cys Cys Val Thr Asn Asn Leu Gln Ala Ser Leu Lys
 1 5 10 15
 Ser Cys Pro Arg Pro Ala Ser Val Cys Ser Ser Gly Val Asn Cys Arg
 20 25 30
 Pro Glu Leu Cys Leu Gly Tyr Val Cys Gln Pro Met Ala Cys Leu Pro
 35 40 45
 Ser Val Cys Leu Pro Thr Thr Phe Arg Pro Ala Ser Cys Leu Ser Lys
 50 55 60
 Thr Tyr Leu Ser Ser Ser Cys Gln Ala Ala Ser Gly Ile Ser Gly Ser
 65 70 75 80
 Met Gly Pro Gly Ser Trp Tyr Ser Glu Gly Ala Phe Asn Gly Asn Glu
 85 90 95
 Lys Glu Thr Met Gln Phe Leu Asn Asp Arg Leu Ala Ser Tyr Leu Thr
 100 105 110
 Arg Val Arg Gln Leu Glu Gln Glu Asn Ala Glu Leu Glu Ser Arg Ile
 115 120 125
 Gln Glu Ala Ser His Ser Gln Val Leu Thr Met Thr Pro Asp Tyr Gln
 130 135 140
 Ser His Phe Arg Thr Ile Glu Leu Gln Gln Lys Ile Leu Cys Thr
 145 150 155 160
 Lys Ala Glu Asn Ala Arg Met Val Val Asn Ile Asp Asn Ala Lys Leu
 165 170 175
 Ala Ala Asp Asp Phe Arg Ala Lys Tyr Glu Ala Glu Leu Ala Met Arg
 180 185 190
 Gln Leu Val Glu Ala Asp Ile Asn Gly Leu Arg Arg Ile Leu Asp Asp
 195 200 205
 Leu Thr Leu Cys Lys Ala Asp Leu Glu Ala Gln Val Glu Ser Leu Lys
 210 215 220
 Glu Glu Leu Met Cys Leu Lys Lys Asn His Glu Glu Glu Val Gly Ser
 225 230 235 240
 Leu Arg Cys Gln Leu Gly Asp Arg Leu Asn Ile Glu Val Asp Ala Ala
 245 250 255
 Pro Pro Val Asp Leu Thr Arg Val Leu Glu Glu Met Arg Cys Gln Tyr
 260 265 270
 Glu Ala Met Val Glu Ala Asn Arg Arg Asp Val Glu Glu Trp Phe Asn
 275 280 285
 Met Gln Met Glu Glu Leu Asn Gln Gln Val Ala Thr Ser Ser Glu Gln
 290 295 300
 Leu Gln Asn Tyr Gln Ser Asp Ile Ile Asp Leu Arg Arg Thr Val Asn
 305 310 315 320
 Thr Leu Glu Ile Glu Leu Gln Ala Gln His Ser Leu Arg Asp Ser Leu
 325 330 335
 Glu Asn Thr Leu Thr Glu Ser Glu Ala Arg Tyr Ser Ser Gln Leu Ala
 340 345 350
 Gln Met Gln Cys Met Ile Thr Asn Val Glu Ala Gln Leu Ala Glu Ile
 355 360 365
 Arg Ala Asp Leu Glu Arg Gln Asn Gln Glu Tyr Gln Val Leu Leu Asp
 370 375 380
 Val Arg Ala Arg Leu Glu Gly Glu Ile Asn Thr Tyr Arg Ser Leu Leu
 385 390 395 400

<400>	433															
Met	Tyr	Ser	Ser	Ser	Ser	Cys	Lys	Leu	Pro	Ser	Leu	Ser	Pro	Val	Ala	
1			5					10						15		
Arg	Ser	Phe	Ser	Ala	Cys	Ser	Val	Gly	Leu	Gly	Arg	Ser	Ser	Tyr	Arg	
			20					25					30			
Ala	Thr	Ser	Cys	Leu	Pro	Ala	Leu	Cys	Leu	Pro	Ala	Gly	Gly	Phe	Ala	
			35				40					45				
Thr	Ser	Tyr	Ser	Gly	Gly	Gly	Gly	Trp	Phe	Gly	Glu	Gly	Ile	Leu	Thr	
	50					55					60					
Gly	Asn	Glu	Lys	Glu	Thr	Met	Gln	Ser	Leu	Asn	Asp	Arg	Leu	Ala	Gly	
65					70					75					80	
Tyr	Leu	Glu	Lys	Val	Arg	Gln	Leu	Glu	Gln	Glu	Asn	Ala	Ser	Leu	Glu	
			85					90						95		
Ser	Arg	Ile	Arg	Glu	Trp	Cys	Glu	Gln	Gln	Val	Pro	Tyr	Met	Cys	Pro	
			100					105					110			
Asp	Tyr	Gln	Ser	Tyr	Phe	Arg	Thr	Ile	Glu	Glu	Leu	Gln	Lys	Lys	Thr	
			115				120					125				
Leu	Cys	Ser	Lys	Ala	Glu	Asn	Ala	Arg	Leu	Val	Val	Glu	Ile	Asp	Asn	
	130					135					140					
Ala	Lys	Leu	Ala	Ala	Asp	Asp	Phe	Arg	Thr	Lys	Tyr	Glu	Thr	Glu	Val	
145					150					155					160	
Ser	Leu	Arg	Gln	Leu	Val	Glu	Ser	Asp	Ile	Asn	Gly	Leu	Arg	Arg	Ile	
			165					170						175		
Leu	Asp	Asp	Leu	Thr	Leu	Cys	Lys	Ser	Asp	Leu	Glu	Ala	Gln	Val	Glu	
			180					185					190			
Ser	Leu	Lys	Glu	Glu	Leu	Leu	Cys	Leu	Lys	Lys	Asn	His	Glu	Glu	Glu	
			195				200					205				
Val	Asn	Ser	Leu	Arg	Cys	Gln	Leu	Gly	Asp	Arg	Leu	Asn	Val	Glu	Val	
	210					215					220					
Asp	Ala	Ala	Pro	Pro	Val	Asp	Leu	Asn	Arg	Val	Leu	Glu	Glu	Met	Arg	
225					230					235					240	
Cys	Gln	Tyr	Glu	Thr	Leu	Val	Glu	Asn	Asn	Arg	Arg	Asp	Ala	Glu	Asp	
			245					250						255		
Trp	Leu	Asp	Thr	Gln	Ser	Glu	Glu	Leu	Asn	Gln	Gln	Val	Val	Ser	Ser	
			260					265					270			
Ser	Glu	Gln	Leu	Gln	Ser	Cys	Gln	Ala	Glu	Ile	Ile	Glu	Leu	Arg	Arg	
			275				280					285				
Thr	Val	Asn	Ala	Leu	Glu	Ile	Glu	Leu	Gln	Ala	Gln	His	Ser	Met	Arg	
	290					295					300					
Asp	Ala	Leu	Glu	Ser	Thr	Leu	Ala	Glu	Thr	Glu	Ala	Arg	Tyr	Ser	Ser	
305					310					315					320	
Gln	Leu	Ala	Gln	Met	Gln	Cys	Met	Ile	Thr	Asn	Val	Glu	Ala	Gln	Leu	

Pro Asp Tyr Ser Pro Ser Lys Ser Cys Leu Pro Cys Leu Pro Ala Ala
 385 390 395 400
 Ser Cys Gly Pro Ser Ala Ala Arg Thr Asn Cys Ser Pro Arg Pro Ile
 405 410 415
 Cys Val Pro Cys Pro Gly Gly Arg Phe
 420 425
 <210> 434
 <211> 467
 <212> PRT
 <213> Homo sapiens

<400> 434
 Met Ala Thr Gln Thr Cys Thr Pro Thr Phe Ser Thr Gly Ser Ile Lys
 1 5 10 15
 Gly Leu Cys Gly Thr Ala Gly Gly Ile Ser Arg Val Ser Ser Ile Arg
 20 25 30
 Ser Val Gly Ser Cys Arg Val Pro Ser Leu Ala Gly Ala Ala Gly Tyr
 35 40 45
 Ile Ser Ser Ala Arg Ser Gly Leu Ser Gly Leu Gly Ser Cys Leu Pro
 50 55 60
 Gly Ser Tyr Leu Ser Ser Glu Cys His Thr Ser Gly Phe Val Gly Ser
 65 70 75 80
 Gly Gly Trp Phe Cys Glu Gly Ser Phe Asn Gly Ser Glu Lys Glu Thr
 85 90 95
 Met Gln Phe Leu Asn Asp Arg Leu Ala Asn Tyr Leu Glu Lys Val Arg
 100 105 110
 Gln Leu Glu Arg Glu Asn Ala Glu Leu Glu Ser Arg Ile Gln Glu Trp
 115 120 125
 Tyr Glu Phe Gln Ile Pro Tyr Ile Cys Pro Asp Tyr Gln Ser Tyr Phe
 130 135 140
 Lys Thr Ile Glu Asp Phe Gln Gln Lys Ile Leu Leu Thr Lys Ser Glu
 145 150 155 160
 Asn Ala Arg Leu Val Leu Gln Ile Asp Asn Ala Lys Leu Ala Ala Asp
 165 170 175
 Asp Phe Arg Thr Lys Tyr Glu Thr Glu Leu Ser Leu Arg Gln Leu Val
 180 185 190
 Glu Ala Asp Ile Asn Gly Leu Arg Arg Ile Leu Asp Glu Leu Thr Leu
 195 200 205
 Cys Lys Ala Asp Leu Glu Ala Gln Val Glu Ser Leu Lys Glu Glu Leu
 210 215 220
 Met Cys Leu Lys Lys Asn His Glu Glu Glu Val Ser Val Leu Arg Cys
 225 230 235 240
 Gln Leu Gly Asp Arg Leu Asn Val Glu Val Asp Ala Ala Pro Pro Val
 245 250 255
 Asp Leu Asn Lys Ile Leu Glu Asp Met Arg Cys Gln Tyr Glu Ala Leu
 260 265 270
 Val Glu Asn Asn Arg Arg Asp Val Glu Ala Trp Phe Asn Thr Gln Thr
 275 280 285
 Glu Glu Leu Asn Gln Gln Val Val Ser Ser Ser Glu Gln Leu Gln Cys
 290 295 300
 Cys Gln Thr Glu Ile Ile Glu Leu Arg Arg Thr Val Asn Ala Leu Glu
 305 310 315 320
 Ile Glu Leu Gln Ala Gln His Ser Met Arg Asn Ser Leu Glu Ser Thr
 325 330 335
 Leu Ala Glu Thr Glu Ala Arg Tyr Ser Ser Gln Leu Ala Gln Met Gln
 340 345 350
 Cys Leu Ile Ser Asn Val Glu Ala Gln Leu Ser Glu Ile Arg Cys Asp
 355 360 365
 Leu Glu Arg Gln Asn Gln Glu Tyr Gln Val Leu Leu Asp Val Lys Ala
 370 375 380

Arg Leu Glu Gly Glu Ile Ala Thr Tyr Arg His Leu Leu Glu Gly Glu
 385 390 395 400
 Asp Cys Lys Leu Pro Gln Pro Cys Ala Thr Ala Cys Lys Pro Val
 405 410 415
 Ile Arg Val Pro Ser Val Pro Pro Val Pro Cys Val Pro Ser Val Pro
 420 425 430
 Cys Thr Pro Ala Pro Gln Val Gly Thr Gln Ile Arg Thr Ile Thr Glu
 435 440 445
 Glu Ile Arg Asp Gly Lys Val Ile Ser Ser Arg Glu His Val Gln Ser
 450 455 460
 Arg Pro Leu
 465
 <210> 435
 <211> 420
 <212> PRT
 <213> Homo sapiens

<400> 435
 Met Ser Leu Arg Leu Gln Ser Ser Ser Ala Ser Tyr Gly Gly Gly Phe
 1 5 10 15
 Gly Gly Gly Ser Cys Gln Leu Gly Gly Gly Arg Gly Val Ser Thr Cys
 20 25 30
 Ser Thr Arg Phe Val Ser Gly Gly Ser Ala Gly Gly Tyr Gly Gly Gly
 35 40 45
 Val Ser Cys Gly Phe Gly Gly Gly Ala Gly Ser Gly Phe Gly Gly Gly
 50 55 60
 Tyr Gly Gly Gly Leu Gly Gly Gly Tyr Gly Gly Leu Gly Gly Gly
 65 70 75 80
 Phe Gly Gly Gly Phe Ala Gly Gly Phe Val Asp Phe Gly Ala Cys Asp
 85 90 95
 Gly Gly Leu Leu Thr Gly Asn Glu Lys Ile Thr Met Gln Asn Leu Asn
 100 105 110
 Asp Arg Leu Ala Ser Tyr Leu Glu Lys Val Arg Ala Leu Glu Glu Ala
 115 120 125
 Asn Ala Asp Leu Glu Val Lys Ile Arg Asp Trp His Leu Lys Gln Ser
 130 135 140
 Pro Ala Ser Pro Glu Arg Asp Tyr Ser Pro Tyr Tyr Lys Thr Ile Glu
 145 150 155 160
 Glu Leu Arg Asp Lys Ile Leu Thr Ala Thr Ile Glu Asn Asn Arg Val
 165 170 175
 Ile Leu Glu Ile Asp Asn Ala Arg Leu Ala Val Asp Asp Phe Arg Leu
 180 185 190
 Lys Tyr Glu Asn Glu Leu Ala Leu Arg Gln Ser Val Glu Ala Asp Ile
 195 200 205
 Asn Gly Leu Arg Arg Val Leu Asp Glu Leu Thr Leu Ser Lys Thr Asp
 210 215 220
 Leu Glu Met Gln Ile Glu Ser Leu Asn Glu Glu Leu Ala Tyr Met Lys
 225 230 235 240
 Lys Asn His Glu Glu Met Lys Glu Phe Ser Asn Gln Val Val Gly
 245 250 255
 Gln Val Asn Val Glu Met Asp Ala Thr Pro Gly Ile Asp Leu Thr Arg
 260 265 270
 Val Leu Ala Glu Met Arg Glu Gln Tyr Glu Ala Met Ala Glu Arg Asn
 275 280 285
 Arg Arg Asp Ala Glu Glu Trp Phe His Ala Lys Ser Ala Glu Leu Asn
 290 295 300
 Lys Glu Val Ser Thr Asn Thr Ala Met Ile Gln Thr Ser Lys Thr Glu
 305 310 315 320
 Ile Thr Glu Leu Arg Arg Thr Leu Gln Gly Leu Glu Ile Glu Leu Gln
 325 330 335

Ser Gln Leu Ser Met Lys Ala Gly Leu Glu Asn Thr Val Ala Glu Thr
 340 345 350
 Glu Cys Arg Tyr Ala Leu Gln Leu Gln Gln Ile Gln Gly Leu Ile Ser
 355 360 365
 Ser Ile Glu Ala Gln Leu Ser Glu Leu Arg Ser Glu Met Glu Cys Gln
 370 375 380
 Asn Gln Glu Tyr Lys Met Leu Leu Asp Ile Lys Thr Arg Leu Glu Gln
 385 390 395 400
 Glu Ile Ala Thr Tyr Arg Ser Leu Leu Glu Gly Gln Asp Ala Lys Lys
 405 410 415
 Arg Gln Pro Pro
 420

<210> 436

<211> 456

<212> PRT

<213> Homo sapiens

<400> 436
 Met Thr Thr Thr Phe Leu Gln Thr Ser Ser Ser Thr Phe Gly Gly Gly
 1 5 10 15
 Ser Thr Arg Gly Gly Ser Leu Leu Ala Gly Gly Gly Gly Phe Gly Gly
 20 25 30
 Gly Ser Leu Ser Gly Gly Gly Gly Ser Arg Ser Ile Ser Ala Ser Ser
 35 40 45
 Ala Arg Phe Val Ser Ser Gly Ser Gly Gly Gly Tyr Gly Gly Gly Met
 50 55 60
 Arg Val Cys Gly Phe Gly Gly Gly Ala Gly Ser Val Phe Gly Gly Gly
 65 70 75 80
 Phe Gly Gly Gly Val Gly Gly Gly Phe Gly Gly Gly Phe Gly Gly Gly
 85 90 95
 Asp Gly Gly Leu Leu Ser Gly Asn Glu Lys Ile Thr Met Gln Asn Leu
 100 105 110
 Asn Asp Arg Leu Ala Ser Tyr Leu Asp Lys Val Arg Ala Leu Glu Glu
 115 120 125
 Ala Asn Ala Asp Leu Glu Val Lys Ile His Asp Trp Tyr Gln Lys Gln
 130 135 140
 Thr Pro Thr Ser Pro Glu Cys Asp Tyr Ser Gln Tyr Phe Lys Thr Ile
 145 150 155 160
 Glu Glu Leu Arg Asp Lys Ile Met Ala Thr Thr Ile Asp Asn Ser Arg
 165 170 175
 Val Ile Leu Glu Ile Asp Asn Ala Arg Leu Ala Ala Asp Asp Phe Arg
 180 185 190
 Leu Lys Tyr Glu Asn Glu Leu Ala Leu Arg Gln Gly Val Glu Ala Asp
 195 200 205
 Ile Asn Gly Leu Arg Arg Val Leu Asp Glu Leu Thr Leu Ala Arg Thr
 210 215 220
 Asp Leu Glu Met Gln Ile Glu Gly Leu Asn Glu Glu Leu Ala Tyr Leu
 225 230 235 240
 Lys Lys Asn His Glu Glu Glu Met Lys Glu Phe Ser Ser Gln Leu Ala
 245 250 255
 Gly Gln Val Asn Val Glu Met Asp Ala Ala Pro Gly Val Asp Leu Thr
 260 265 270
 Arg Val Leu Ala Glu Met Arg Glu Gln Tyr Glu Ala Met Ala Glu Lys
 275 280 285
 Asn Arg Arg Asp Val Glu Ala Trp Phe Phe Ser Lys Thr Glu Glu Leu
 290 295 300
 Asn Lys Glu Val Ala Ser Asn Thr Glu Met Ile Gln Thr Ser Lys Thr
 305 310 315 320
 Glu Ile Thr Asp Leu Arg Arg Thr Met Gln Glu Leu Glu Ile Glu Leu
 325 330 335

Gln Ser Gln Leu Ser Met Lys Ala Gly Leu Glu Asn Ser Leu Ala Glu
 340 345 350
 Thr Glu Cys Arg Tyr Ala Thr Gln Leu Gln Ile Gln Gly Leu Ile
 355 360 365
 Gly Gly Leu Glu Ala Gln Leu Ser Glu Leu Arg Cys Glu Met Glu Ala
 370 375 380
 Gln Asn Gln Glu Tyr Lys Met Leu Leu Asp Ile Lys Thr Arg Leu Glu
 385 390 395 400
 Gln Glu Ile Ala Thr Tyr Arg Ser Leu Leu Glu Gly Gln Asp Ala Lys
 405 410 415
 Met Ala Gly Ile Gly Ile Arg Glu Ala Ser Ser Gly Gly Gly Gly Ser
 420 425 430
 Ser Ser Asn Phe His Ile Asn Val Glu Glu Ser Val Asp Gly Gln Val
 435 440 445
 Val Ser Ser His Lys Arg Glu Ile
 450 455
 <210> 437
 <211> 400
 <212> PRT
 <213> Homo sapiens

<400> 437
 Met Thr Ser Tyr Ser Tyr Arg Gln Ser Ser Ala Thr Ser Ser Phe Gly
 1 5 10 15
 Gly Leu Gly Gly Gly Ser Val Arg Phe Gly Pro Gly Val Ala Phe Arg
 20 25 30
 Ala Pro Ser Ile His Gly Gly Ser Gly Gly Arg Gly Val Ser Val Ser
 35 40 45
 Ser Ala Arg Phe Val Ser Ser Ser Ser Gly Ala Tyr Gly Gly Gly
 50 55 60
 Tyr Gly Gly Val Leu Thr Ala Ser Asp Gly Leu Leu Ala Gly Asn Glu
 65 70 75 80
 Lys Leu Thr Met Gln Asn Leu Asn Asp Arg Leu Ala Ser Tyr Leu Asp
 85 90 95
 Lys Val Arg Ala Leu Glu Ala Ala Asn Gly Glu Leu Glu Val Lys Ile
 100 105 110
 Arg Asp Trp Tyr Gln Lys Gln Gly Pro Gly Pro Ser Arg Asp Tyr Ser
 115 120 125
 His Tyr Tyr Thr Thr Ile Gln Asp Leu Arg Asp Lys Ile Leu Gly Ala
 130 135 140
 Thr Ile Glu Asn Ser Arg Ile Val Leu Gln Ile Asp Asn Ala Arg Leu
 145 150 155 160
 Ala Ala Asp Asp Phe Arg Thr Lys Phe Glu Thr Glu Gln Ala Leu Arg
 165 170 175
 Met Ser Val Glu Ala Asp Ile Asn Gly Leu Arg Arg Val Leu Asp Glu
 180 185 190
 Leu Thr Leu Ala Arg Thr Asp Leu Glu Met Gln Ile Glu Gly Leu Lys
 195 200 205
 Glu Glu Leu Ala Tyr Leu Lys Lys Asn His Glu Glu Ile Ser Thr
 210 215 220
 Leu Arg Gly Gln Val Gly Gly Gln Val Ser Val Glu Val Asp Ser Ala
 225 230 235 240
 Pro Gly Thr Asp Leu Ala Lys Ile Leu Ser Asp Met Arg Ser Gln Tyr
 245 250 255
 Glu Val Met Ala Glu Gln Asn Arg Lys Asp Ala Glu Ala Trp Phe Thr
 260 265 270
 Ser Arg Thr Glu Glu Leu Asn Arg Glu Val Ala Gly His Thr Glu Gln
 275 280 285
 Leu Gln Met Ser Arg Ser Glu Val Thr Asp Leu Arg Arg Thr Leu Gln
 290 295 300

Gly Leu Glu Ile Glu Leu Gln Ser Gln Leu Ser Met Lys Ala Ala Leu
 305 310 315 320
 Glu Asp Thr Leu Ala Glu Thr Glu Ala Arg Phe Gly Ala Gln Leu Ala
 325 330 335
 His Ile Gln Ala Leu Ile Ser Gly Ile Glu Ala Gln Leu Gly Asp Val
 340 345 350
 Arg Ala Asp Ser Glu Arg Gln Asn Gln Glu Tyr Gln Arg Leu Met Asp
 355 360 365
 Ile Lys Ser Arg Leu Glu Gln Glu Ile Ala Thr Tyr Arg Ser Leu Leu
 370 375 380
 Glu Gly Gln Glu Asp His Tyr Asn Asn Leu Ser Ala Ser Lys Val Leu
 385 390 395 400
 <210> 438

<211> 622

<212> PRT

<213> Homo sapiens

<400> 438

Met Ser Cys Arg Gln Phe Ser Ser Ser Tyr Leu Thr Ser Gly Gly Gly
 1 5 10 15
 Gly Gly Gly Gly Leu Gly Ser Gly Gly Ser Ile Arg Ser Ser Tyr Ser
 20 25 30
 Arg Phe Ser Ser Ser Gly Gly Arg Gly Gly Gly Arg Phe Ser Ser
 35 40 45
 Ser Ser Gly Tyr Gly Gly Gly Ser Ser Arg Val Cys Gly Arg Gly Gly
 50 55 60
 Gly Gly Ser Phe Gly Tyr Ser Tyr Gly Gly Gly Ser Gly Gly Gly Phe
 65 70 75 80
 Ser Ala Ser Ser Leu Gly Gly Gly Phe Gly Gly Ser Arg Gly Phe
 85 90 95
 Gly Gly Ala Ser Gly Gly Gly Tyr Ser Ser Ser Gly Gly Phe Gly Gly
 100 105 110
 Gly Phe Gly Gly Gly Ser Gly Gly Gly Phe Gly Gly Gly Tyr Gly Ser
 115 120 125
 Gly Phe Gly Gly Leu Gly Gly Phe Gly Gly Gly Ala Gly Gly Gly Asp
 130 135 140
 Gly Gly Ile Leu Thr Ala Asn Glu Lys Ser Thr Met Gln Glu Leu Asn
 145 150 155 160
 Ser Arg Leu Ala Ser Tyr Leu Asp Lys Val Gln Ala Leu Glu Glu Ala
 165 170 175
 Asn Asn Asp Leu Glu Asn Lys Ile Gln Asp Trp Tyr Asp Lys Lys Gly
 180 185 190
 Pro Ala Ala Ile Gln Lys Asn Tyr Ser Pro Tyr Tyr Asn Thr Ile Asp
 195 200 205
 Asp Leu Lys Asp Gln Ile Val Asp Leu Thr Val Gly Asn Asn Lys Thr
 210 215 220
 Leu Leu Asp Ile Asp Asn Thr Arg Met Thr Leu Asp Asp Phe Arg Ile
 225 230 235 240
 Lys Phe Glu Met Glu Gln Asn Leu Arg Gln Gly Val Asp Ala Asp Ile
 245 250 255
 Asn Gly Leu Arg Gln Val Leu Asp Asn Leu Thr Met Glu Lys Ser Asp
 260 265 270
 Leu Glu Met Gln Tyr Glu Thr Leu Gln Glu Glu Leu Met Ala Leu Lys
 275 280 285
 Lys Asn His Lys Glu Glu Met Ser Gln Leu Thr Gly Gln Asn Ser Gly
 290 295 300
 Asp Val Asn Val Glu Ile Asn Val Ala Pro Gly Lys Asp Leu Thr Lys
 305 310 315 320
 Thr Leu Asn Asp Met Arg Gln Glu Tyr Glu Gln Leu Ile Ala Lys Asn
 325 330 335

<400>	439															
Met	Thr	Thr	Cys	Ser	Arg	Gln	Phe	Thr	Ser	Ser	Ser	Ser	Met	Lys	Gly	
1				5					10					15		
Ser	Cys	Gly	Ile	Gly	Gly	Gly	Ile	Gly	Gly	Gly	Ser	Ser	Arg	Ile	Ser	
			20					25					30			
Ser	Val	Leu	Ala	Gly	Gly	Ser	Cys	Arg	Ala	Pro	Ser	Thr	Tyr	Gly	Gly	
		35					40					45				
Gly	Leu	Ser	Val	Ser	Ser	Ser	Arg	Phe	Ser	Ser	Gly	Gly	Ala	Tyr	Gly	
	50					55					60					
Leu	Gly	Gly	Gly	Tyr	Gly	Gly	Gly	Phe	Ser	Ser	Ser	Ser	Ser	Ser	Phe	
65				70						75					80	
Gly	Ser	Gly	Phe	Gly	Gly	Gly	Tyr	Gly	Gly	Gly	Leu	Gly	Ala	Gly	Leu	
			85						90					95		
Gly	Gly	Gly	Phe	Gly	Gly	Gly	Phe	Ala	Gly	Gly	Asp	Gly	Leu	Leu	Val	
			100					105					110			
Gly	Ser	Glu	Lys	Val	Thr	Met	Gln	Asn	Leu	Asn	Asp	Arg	Leu	Ala	Ser	
		115					120					125				
Tyr	Leu	Asp	Lys	Val	Arg	Ala	Leu	Glu	Glu	Ala	Asn	Ala	Asp	Leu	Glu	
	130					135					140					

Val Lys Ile Arg Asp Trp Tyr Gln Arg Gln Arg Pro Ala Glu Ile Lys
 145 150 155 160
 Asp Tyr Ser Pro Tyr Phe Lys Thr Ile Glu Asp Leu Arg Asn Lys Ile
 165 170 175
 Leu Thr Ala Thr Val Asp Asn Ala Asn Val Leu Leu Gln Ile Asp Asn
 180 185 190
 Ala Arg Leu Ala Ala Asp Asp Phe Arg Thr Lys Tyr Glu Thr Glu Leu
 195 200 205
 Asn Leu Arg Met Ser Val Glu Ala Asp Ile Asn Gly Leu Arg Arg Val
 210 215 220
 Leu Asp Glu Leu Thr Leu Ala Arg Ala Asp Leu Glu Met Gln Ile Glu
 225 230 235 240
 Ser Leu Lys Glu Glu Leu Ala Tyr Leu Lys Asn His Glu Glu Glu
 245 250 255
 Met Asn Ala Leu Arg Gly Gln Val Gly Gly Asp Val Asn Val Glu Met
 260 265 270
 Asp Ala Ala Pro Gly Val Asp Leu Ser Arg Ile Leu Asn Glu Met Arg
 275 280 285
 Asp Gln Tyr Glu Lys Met Ala Glu Lys Asn Arg Lys Asp Ala Glu Glu
 290 295 300
 Trp Phe Phe Thr Lys Thr Glu Glu Leu Asn Arg Glu Val Ala Thr Asn
 305 310 315 320
 Ser Glu Leu Val Gln Ser Gly Lys Ser Glu Ile Ser Glu Leu Arg Arg
 325 330 335
 Thr Met Gln Asn Leu Glu Ile Glu Leu Gln Ser Gln Leu Ser Met Lys
 340 345 350
 Ala Ser Leu Glu Asn Ser Leu Glu Glu Thr Lys Gly Arg Tyr Cys Met
 355 360 365
 Gln Leu Ala Gln Ile Gln Glu Met Ile Gly Ser Val Glu Glu Gln Leu
 370 375 380
 Ala Gln Leu Arg Cys Glu Met Glu Gln Gln Asn Gln Glu Tyr Lys Ile
 385 390 395 400
 Leu Leu Asp Val Lys Thr Arg Leu Glu Gln Glu Ile Ala Thr Tyr Arg
 405 410 415
 Arg Leu Leu Glu Gly Glu Asp Ala His Leu Ser Ser Ser Gln Phe Ser
 420 425 430
 Ser Gly Ser Gln Ser Ser Arg Asp Val Thr Ser Ser Ser Arg Gln Ile
 435 440 445
 Arg Thr Lys Val Met Asp Val His Asp Gly Lys Val Val Ser Thr His
 450 455 460
 Glu Gln Val Leu Arg Thr Lys Asn
 465 470
 <210> 440
 <211> 473
 <212> PRT
 <213> Homo sapiens

<400> 440
 Met Thr Thr Cys Ser Arg Gln Phe Thr Ser Ser Ser Ser Met Lys Gly
 1 5 10 15
 Ser Cys Gly Ile Gly Gly Gly Ile Gly Gly Gly Ser Ser Arg Ile Ser
 20 25 30
 Ser Val Leu Ala Gly Gly Ser Cys Arg Ala Pro Ser Thr Tyr Gly Gly
 35 40 45
 Gly Leu Ser Val Ser Ser Arg Phe Ser Ser Gly Gly Ala Cys Gly Leu
 50 55 60
 Gly Gly Gly Tyr Gly Gly Gly Phe Ser Ser Ser Ser Phe Gly Ser
 65 70 75 80
 Gly Phe Gly Gly Gly Tyr Gly Gly Gly Leu Gly Ala Gly Phe Gly Gly
 85 90 95

Gly Leu Gly Ala Gly Phe Gly Gly Gly Phe Ala Gly Gly Asp Gly Leu
 100 105 110
 Leu Val Gly Ser Glu Lys Val Thr Met Gln Asn Leu Asn Asp Arg Leu
 115 120 125
 Ala Ser Tyr Leu Asp Lys Val Arg Ala Leu Glu Glu Ala Asn Ala Asp
 130 135 140
 Leu Glu Val Lys Ile Arg Asp Trp Tyr Gln Arg Gln Arg Pro Ser Glu
 145 150 155 160
 Ile Lys Asp Tyr Ser Pro Tyr Phe Lys Thr Ile Glu Asp Leu Arg Asn
 165 170 175
 Lys Ile Ile Ala Ala Thr Ile Glu Asn Ala Gln Pro Ile Leu Gln Ile
 180 185 190
 Asp Asn Ala Arg Leu Ala Ala Asp Asp Phe Arg Thr Lys Tyr Glu His
 195 200 205
 Glu Leu Ala Leu Arg Gln Thr Val Glu Ala Asp Val Asn Gly Leu Arg
 210 215 220
 Arg Val Leu Asp Glu Leu Thr Leu Ala Arg Thr Asp Leu Glu Met Gln
 225 230 235 240
 Ile Glu Gly Leu Lys Glu Glu Leu Ala Tyr Leu Arg Lys Asn His Glu
 245 250 255
 Glu Glu Met Leu Ala Leu Arg Gly Gln Thr Gly Gly Asp Val Asn Val
 260 265 270
 Glu Met Asp Ala Ala Pro Gly Val Asp Leu Ser Arg Ile Leu Asn Glu
 275 280 285
 Met Arg Asp Gln Tyr Glu Gln Met Ala Glu Lys Asn Arg Arg Asp Ala
 290 295 300
 Glu Thr Trp Phe Leu Ser Lys Thr Glu Glu Leu Asn Lys Glu Val Ala
 305 310 315 320
 Ser Asn Ser Glu Leu Val Gln Ser Ser Arg Ser Glu Val Thr Glu Leu
 325 330 335
 Arg Arg Val Leu Gln Gly Leu Glu Ile Glu Leu Gln Ser Gln Leu Ser
 340 345 350
 Met Lys Ala Ser Leu Glu Asn Ser Leu Glu Glu Thr Lys Gly Arg Tyr
 355 360 365
 Cys Met Gln Leu Ser Gln Ile Gln Gly Leu Ile Gly Ser Val Glu Glu
 370 375 380
 Gln Leu Ala Gln Leu Arg Cys Glu Met Glu Gln Gln Ser Gln Glu Tyr
 385 390 395 400
 Gln Ile Leu Leu Asp Val Lys Thr Arg Leu Glu Gln Glu Ile Ala Thr
 405 410 415
 Tyr Arg Arg Leu Leu Glu Gly Glu Asp Ala His Leu Ser Ser Gln Gln
 420 425 430
 Ala Ser Gly Gln Ser Tyr Ser Ser Arg Glu Val Phe Thr Ser Ser Ser
 435 440 445
 Ser Ser Ser Ser Arg Gln Thr Arg Pro Ile Leu Lys Glu Gln Ser Ser
 450 455 460
 Ser Ser Phe Ser Gln Gly Gln Ser Ser
 465 470
 <210> 441
 <211> 432
 <212> PRT
 <213> Homo sapiens
 <400> 441
 Met Thr Thr Ser Ile Arg Gln Phe Thr Ser Ser Ser Ser Ile Lys Gly
 1 5 10 15
 Ser Ser Gly Leu Gly Gly Gly Ser Ser Arg Thr Ser Cys Arg Leu Ser
 20 25 30
 Gly Gly Leu Gly Ala Gly Ser Cys Arg Leu Gly Ser Ala Gly Gly Leu
 35 40 45

Gly Ser Thr Leu Gly Gly Ser Ser Tyr Ser Ser Cys Tyr Ser Phe Gly
 50 55 60
 Ser Gly Gly Gly Tyr Gly Ser Ser Phe Gly Gly Val Asp Gly Leu Leu
 65 70 75 80
 Ala Gly Gly Glu Lys Ala Thr Met Gln Asn Leu Asn Asp Arg Leu Ala
 85 90 95
 Ser Tyr Leu Asp Lys Val Arg Ala Leu Glu Glu Ala Asn Thr Glu Leu
 100 105 110
 Glu Val Lys Ile Arg Asp Trp Tyr Gln Arg Gln Ala Pro Gly Pro Ala
 115 120 125
 Arg Asp Tyr Ser Gln Tyr Tyr Arg Thr Ile Glu Glu Leu Gln Asn Lys
 130 135 140
 Ile Leu Thr Ala Thr Val Asp Asn Ala Asn Ile Leu Leu Gln Ile Asp
 145 150 155 160
 Asn Ala Arg Leu Ala Ala Asp Asp Phe Arg Thr Lys Phe Glu Thr Glu
 165 170 175
 Gln Ala Leu Arg Leu Ser Val Glu Ala Asp Ile Asn Gly Leu Arg Arg
 180 185 190
 Val Leu Asp Glu Leu Thr Leu Ala Arg Ala Asp Leu Glu Met Gln Ile
 195 200 205
 Glu Asn Leu Lys Glu Glu Leu Ala Tyr Leu Lys Lys Asn His Glu Glu
 210 215 220
 Glu Met Asn Ala Leu Arg Gly Gln Val Gly Gly Glu Ile Asn Val Glu
 225 230 235 240
 Met Asp Ala Ala Pro Gly Val Asp Leu Ser Arg Ile Leu Asn Glu Met
 245 250 255
 Arg Asp Gln Tyr Glu Lys Met Ala Glu Lys Asn Arg Lys Asp Ala Glu
 260 265 270
 Asp Trp Phe Phe Ser Lys Thr Glu Glu Leu Asn Arg Glu Val Ala Thr
 275 280 285
 Asn Ser Glu Leu Val Gln Ser Gly Lys Ser Glu Ile Ser Glu Leu Arg
 290 295 300
 Arg Thr Met Gln Ala Leu Glu Ile Glu Leu Gln Ser Gln Leu Ser Met
 305 310 315 320
 Lys Ala Ser Leu Glu Gly Asn Leu Ala Glu Thr Glu Asn Arg Tyr Cys
 325 330 335
 Val Gln Leu Ser Gln Ile Gln Gly Leu Ile Gly Ser Val Glu Glu Gln
 340 345 350
 Leu Ala Gln Leu Arg Cys Glu Met Glu Gln Gln Asn Gln Glu Tyr Lys
 355 360 365
 Ile Leu Leu Asp Val Lys Thr Arg Leu Glu Gln Glu Ile Ala Thr Tyr
 370 375 380
 Arg Arg Leu Leu Glu Gly Glu Asp Ala His Leu Thr Gln Tyr Lys Lys
 385 390 395 400
 Glu Pro Val Thr Thr Arg Gln Val Arg Thr Ile Val Glu Glu Val Gln
 405 410 415
 Asp Gly Lys Val Ile Ser Ser Arg Glu Gln Val His Gln Thr Thr Arg
 420 425 430
 <210> 442
 <211> 469
 <212> PRT
 <213> Homo sapiens
 <400> 442
 Met Ser Ile His Phe Ser Ser Pro Val Phe Thr Ser Arg Ser Ala Ala
 1 5 10 15
 Phe Ser Gly Arg Gly Ala Gln Val Arg Leu Ser Ser Ala Arg Pro Gly
 20 25 30
 Gly Leu Gly Ser Ser Ser Leu Tyr Gly Leu Gly Ala Ser Arg Pro Arg
 35 40 45

Val Ala Val Arg Ser Ala Tyr Gly Gly Pro Val Gly Ala Gly Ile Arg
 50 55 60
 Glu Val Thr Ile Asn Gln Ser Leu Leu Ala Pro Leu Arg Leu Asp Ala
 65 70 75 80
 Asp Pro Ser Leu Gln Arg Val Arg Gln Glu Glu Ser Glu Gln Ile Lys
 85 90 95
 Thr Leu Asn Asn Lys Phe Ala Ser Phe Ile Asp Lys Val Arg Phe Leu
 100 105 110
 Glu Gln Gln Asn Lys Leu Leu Glu Thr Lys Trp Thr Leu Leu Gln Glu
 115 120 125
 Gln Lys Ser Ala Lys Ser Ser Arg Leu Pro Asp Ile Phe Glu Ala Gln
 130 135 140
 Ile Ala Gly Leu Arg Gly Gln Leu Glu Ala Leu Gln Val Asp Gly Gly
 145 150 155 160
 Arg Leu Glu Ala Glu Leu Arg Ser Met Gln Asp Val Val Glu Asp Phe
 165 170 175
 Lys Asn Lys Tyr Glu Asp Glu Ile Asn Arg Arg Thr Ala Ala Glu Asn
 180 185 190
 Glu Phe Val Val Leu Lys Lys Asp Val Asp Ala Ala Tyr Met Ser Lys
 195 200 205
 Val Glu Leu Glu Ala Lys Val Asp Ala Leu Asn Asp Glu Ile Asn Phe
 210 215 220
 Leu Arg Thr Leu Asn Glu Thr Glu Leu Thr Glu Leu Gln Ser Gln Ile
 225 230 235 240
 Ser Asp Thr Ser Val Val Leu Ser Met Asp Asn Ser Arg Ser Leu Asp
 245 250 255
 Leu Asp Gly Ile Ile Ala Glu Val Lys Ala Gln Tyr Glu Glu Met Ala
 260 265 270
 Lys Cys Ser Arg Ala Glu Ala Glu Ala Trp Tyr Gln Thr Lys Phe Glu
 275 280 285
 Thr Leu Gln Ala Gln Ala Gly Lys His Gly Asp Asp Leu Arg Asn Thr
 290 295 300
 Arg Asn Glu Ile Ser Glu Met Asn Arg Ala Ile Gln Arg Leu Gln Ala
 305 310 315 320
 Glu Ile Asp Asn Ile Lys Asn Gln Arg Ala Lys Leu Glu Ala Ala Ile
 325 330 335
 Ala Glu Ala Glu Glu Arg Gly Glu Leu Ala Leu Lys Asp Ala Arg Ala
 340 345 350
 Lys Gln Glu Glu Leu Glu Ala Ala Leu Gln Arg Ala Lys Gln Asp Met
 355 360 365
 Ala Arg Gln Leu Arg Glu Tyr Gln Glu Leu Met Ser Val Lys Leu Ala
 370 375 380
 Leu Asp Ile Glu Ile Ala Thr Tyr Arg Lys Leu Leu Glu Gly Glu Glu
 385 390 395 400
 Ser Arg Leu Ala Gly Asp Gly Val Gly Ala Val Asn Ile Ser Val Met
 405 410 415
 Asn Ser Thr Gly Gly Ser Ser Ser Gly Gly Gly Ile Gly Leu Thr Leu
 420 425 430
 Gly Gly Thr Met Gly Ser Asn Ala Leu Ser Phe Ser Ser Ala Gly
 435 440 445
 Pro Gly Leu Leu Lys Ala Tyr Ser Ile Arg Thr Ala Ser Ala Ser Arg
 450 455 460
 Arg Ser Ala Arg Asp
 465

<210> 443

<211> 486

<212> PRT

<213> Homo sapiens

<400> 443
 Met Thr Cys Gly Ser Tyr Cys Gly Gly Arg Ala Phe Ser Cys Ile Ser
 1 5 10 15
 Ala Cys Gly Pro Arg Pro Gly Arg Cys Cys Ile Thr Ala Ala Pro Tyr
 20 25 30
 Arg Gly Ile Ser Cys Tyr Arg Gly Leu Thr Gly Gly Phe Gly Ser His
 35 40 45
 Ser Val Cys Gly Gly Phe Arg Ala Gly Ser Cys Gly Arg Ser Phe Gly
 50 55 60
 Tyr Arg Ser Gly Gly Val Cys Gly Pro Ser Pro Cys Ile Thr Thr
 65 70 75 80
 Val Ser Val Asn Glu Ser Leu Leu Thr Pro Leu Asn Leu Glu Ile Asp
 85 90 95
 Pro Asn Ala Gln Cys Val Lys Gln Glu Glu Lys Glu Gln Ile Lys Ser
 100 105 110
 Leu Asn Ser Arg Phe Ala Ala Phe Ile Asp Lys Val Arg Phe Leu Glu
 115 120 125
 Gln Gln Asn Lys Leu Leu Glu Thr Lys Leu Gln Phe Tyr Gln Asn Arg
 130 135 140
 Glu Cys Cys Gln Ser Asn Leu Glu Pro Leu Phe Glu Gly Tyr Ile Glu
 145 150 155 160
 Thr Leu Arg Arg Glu Ala Glu Cys Val Glu Ala Asp Ser Gly Arg Leu
 165 170 175
 Ala Ser Glu Leu Asn His Val Gln Glu Val Leu Glu Gly Tyr Lys Lys
 180 185 190
 Lys Tyr Glu Glu Glu Val Ser Leu Arg Ala Thr Ala Glu Asn Glu Phe
 195 200 205
 Val Ala Leu Lys Lys Asp Val Asp Cys Ala Tyr Leu Arg Lys Ser Asp
 210 215 220
 Leu Glu Ala Asn Val Glu Ala Leu Ile Gln Glu Ile Asp Phe Leu Arg
 225 230 235 240
 Arg Leu Tyr Glu Glu Glu Ile Arg Val Leu Gln Ser His Ile Ser Asp
 245 250 255
 Thr Ser Val Val Val Lys Leu Asp Asn Ser Arg Asp Leu Asn Met Asp
 260 265 270
 Cys Ile Ile Ala Glu Ile Lys Ala Gln Tyr Asp Asp Ile Val Thr Arg
 275 280 285
 Ser Arg Ala Glu Ala Glu Ser Trp Tyr Arg Ser Lys Cys Glu Glu Met
 290 295 300
 Lys Ala Thr Val Ile Arg His Gly Glu Thr Leu Arg Arg Thr Lys Glu
 305 310 315 320
 Glu Ile Asn Glu Leu Asn Arg Met Ile Gln Arg Leu Thr Ala Glu Val
 325 330 335
 Glu Asn Ala Lys Cys Gln Asn Ser Lys Leu Glu Ala Ala Val Ala Gln
 340 345 350
 Ser Glu Gln Gln Gly Glu Ala Ala Leu Ser Asp Ala Arg Cys Lys Leu
 355 360 365
 Ala Glu Leu Glu Gly Ala Leu Gln Lys Ala Lys Gln Asp Met Ala Cys
 370 375 380
 Leu Ile Arg Glu Tyr Gln Glu Val Met Asn Ser Lys Leu Gly Leu Asp
 385 390 395 400
 Ile Glu Ile Ala Thr Tyr Arg Arg Leu Leu Glu Gly Glu Glu Gln Arg
 405 410 415
 Leu Cys Glu Gly Val Gly Ser Val Asn Val Cys Val Ser Ser Ser Arg
 420 425 430
 Gly Gly Val Val Cys Gly Asp Leu Cys Ala Ser Thr Thr Ala Pro Val
 435 440 445
 Val Ser Thr Arg Val Ser Ser Val Pro Ser Asn Ser Asn Val Val Val
 450 455 460
 Gly Thr Thr Asn Ala Cys Ala Pro Ser Ala Arg Val Gly Val Cys Gly
 465 470 475 480
 Gly Ser Cys Lys Arg Cys
 485

<210> 444

<211> 111

<212> PRT

<213> Homo sapiens

<400> 444

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Met Lys Ala Thr Val Ile Trp His Gly Glu Thr Val Gly Cys Thr Lys
1          5          10          15
Glu Glu Ile Lys Glu Leu Thr His Met Ile Gln Arg Leu Met Ala Lys
          20          25          30
Val Glu Asn Ala Lys Cys Gln Val Trp Gly Ile Cys Ala Gln Gly Gln
          35          40          45
Arg Asp Leu Trp Pro Asn Leu Cys His Thr Ala Tyr Val Cys Pro Thr
          50          55          60
Trp Ile Ser Ala Phe Ile Leu Gln Ser Leu Cys Pro Cys Arg Val Pro
          65          70          75          80
Gly Cys Gly Gln Ser Gly Ser Ala Arg Met Met Lys Ala Arg Gly Leu
          85          90          95
Phe Leu Arg Cys Ser Gln Leu Asn Gly Arg Leu Asp Ile Phe Arg
          100          105          110

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<210> 445

<211> 505

<212> PRT

<213> Homo sapiens

<400> 445

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Met Thr Cys Gly Ser Gly Phe Gly Gly Arg Ala Phe Ser Cys Ile Ser
1          5          10          15
Ala Cys Gly Pro Arg Pro Gly Arg Cys Cys Ile Thr Ala Ala Pro Tyr
          20          25          30
Arg Gly Ile Ser Cys Tyr Arg Gly Leu Thr Gly Gly Phe Gly Ser His
          35          40          45
Ser Val Cys Gly Gly Phe Arg Ala Gly Ser Cys Gly Arg Ser Phe Gly
          50          55          60
Tyr Arg Ser Gly Gly Val Cys Gly Pro Ser Pro Pro Cys Ile Thr Thr
          65          70          75          80
Val Ser Val Asn Glu Ser Leu Leu Thr Pro Leu Asn Leu Glu Ile Asp
          85          90          95
Pro Asn Ala Gln Cys Val Lys Gln Glu Glu Lys Glu Gln Ile Lys Ser
          100          105          110
Leu Asn Ser Arg Phe Ala Ala Phe Ile Asp Lys Val Arg Phe Leu Glu
          115          120          125
Gln Gln Asn Lys Leu Leu Glu Thr Lys Leu Gln Phe Tyr Gln Asn Arg
          130          135          140
Glu Cys Cys Gln Ser Asn Leu Glu Pro Leu Phe Glu Gly Tyr Ile Glu
          145          150          155          160
Thr Leu Arg Arg Glu Ala Glu Cys Val Glu Ala Asp Ser Gly Arg Leu
          165          170          175
Ala Ser Glu Leu Asn His Val Gln Glu Val Leu Glu Gly Tyr Lys Lys
          180          185          190
Lys Tyr Glu Glu Glu Val Ser Leu Arg Ala Thr Ala Glu Asn Glu Phe
          195          200          205
Val Ala Leu Lys Lys Asp Val Asp Cys Ala Tyr Leu Arg Lys Ser Asp
          210          215          220
Leu Glu Ala Asn Val Glu Ala Leu Ile Gln Glu Ile Asp Phe Leu Arg
          225          230          235          240
Arg Leu Tyr Glu Glu Ile Arg Ile Leu Gln Ser His Ile Ser Asp
          245          250          255

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Thr Ser Val Val Val Lys Leu Asp Asn Ser Arg Asp Leu Asn Met Asp
 260 265 270
 Cys Ile Ile Ala Glu Ile Lys Ala Gln Tyr Asp Asp Ile Val Thr Arg
 275 280 285
 Ser Arg Ala Glu Ala Glu Ser Trp Tyr Arg Ser Lys Cys Glu Glu Met
 290 295 300
 Lys Ala Thr Val Ile Arg His Gly Glu Thr Leu Arg Arg Thr Lys Glu
 305 310 315 320
 Glu Ile Asn Glu Leu Asn Arg Met Ile Gln Arg Leu Thr Ala Glu Val
 325 330 335
 Glu Asn Ala Lys Cys Gln Asn Ser Lys Leu Glu Ala Ala Val Ala Gln
 340 345 350
 Ser Glu Gln Gln Gly Glu Ala Ala Leu Ser Asp Ala Arg Cys Lys Leu
 355 360 365
 Ala Glu Leu Glu Gly Ala Leu Gln Lys Ala Lys Gln Asp Met Ala Cys
 370 375 380
 Leu Ile Arg Glu Tyr Gln Glu Val Met Asn Ser Lys Leu Gly Leu Asp
 385 390 395 400
 Ile Glu Ile Ala Thr Tyr Arg Arg Leu Leu Glu Gly Glu Glu Gln Arg
 405 410 415
 Leu Cys Glu Gly Ile Gly Ala Val Asn Val Cys Val Ser Ser Ser Arg
 420 425 430
 Gly Gly Val Val Cys Gly Asp Leu Cys Val Ser Gly Ser Arg Pro Val
 435 440 445
 Thr Gly Ser Val Cys Ser Ala Pro Cys Asn Gly Asn Val Ala Val Ser
 450 455 460
 Thr Gly Leu Cys Ala Pro Cys Gly Gln Leu Asn Thr Thr Cys Gly Gly
 465 470 475 480
 Gly Ser Cys Gly Val Gly Ser Cys Gly Ile Ser Ser Leu Gly Val Gly
 485 490 495
 Ser Cys Gly Ser Ser Cys Arg Lys Cys
 500 505
 <210> 446
 <211> 486
 <212> PRT
 <213> Homo sapiens

<400> 446
 Met Thr Cys Gly Ser Tyr Cys Gly Gly Arg Ala Phe Ser Cys Ile Ser
 1 5 10 15
 Ala Cys Gly Pro Arg Pro Gly Arg Cys Cys Ile Thr Ala Ala Pro Tyr
 20 25 30
 Arg Gly Ile Ser Cys Tyr Arg Gly Leu Thr Gly Gly Phe Gly Ser His
 35 40 45
 Ser Val Cys Gly Gly Phe Arg Ala Gly Ser Cys Gly Arg Ser Phe Gly
 50 55 60
 Tyr Arg Ser Gly Gly Val Cys Gly Pro Ser Pro Pro Cys Ile Thr Thr
 65 70 75 80
 Val Ser Val Asn Glu Ser Leu Leu Thr Pro Leu Asn Leu Glu Ile Asp
 85 90 95
 Pro Asn Ala Gln Cys Val Lys Gln Glu Glu Lys Glu Gln Ile Lys Ser
 100 105 110
 Leu Asn Ser Arg Phe Ala Ala Phe Ile Asp Lys Val Arg Phe Leu Glu
 115 120 125
 Gln Gln Asn Lys Leu Leu Glu Thr Lys Leu Gln Phe Tyr Gln Asn Arg
 130 135 140
 Glu Cys Cys Gln Ser Asn Leu Glu Pro Leu Phe Glu Gly Tyr Ile Glu
 145 150 155 160
 Thr Leu Arg Arg Glu Ala Glu Cys Val Glu Ala Asp Ser Gly Arg Leu
 165 170 175

Ala Ser Glu Leu Asn His Val Gln Glu Val Leu Glu Gly Tyr Lys Lys
 180 185 190
 Lys Tyr Glu Glu Glu Val Ser Leu Arg Ala Thr Ala Glu Asn Glu Phe
 195 200 205
 Val Ala Leu Lys Lys Asp Val Asp Cys Ala Tyr Leu Arg Lys Ser Asp
 210 215 220
 Leu Glu Ala Asn Val Glu Ala Leu Ile Gln Glu Ile Asp Phe Leu Arg
 225 230 235 240
 Arg Leu Tyr Glu Glu Glu Ile Arg Val Leu Gln Ser His Ile Ser Asp
 245 250 255
 Thr Ser Val Val Val Lys Leu Asp Asn Ser Arg Asp Leu Asn Met Asp
 260 265 270
 Cys Ile Ile Ala Glu Ile Lys Ala Gln Tyr Asp Asp Ile Val Thr Arg
 275 280 285
 Ser Arg Ala Glu Ala Glu Ser Trp Tyr Arg Ser Lys Cys Glu Glu Met
 290 295 300
 Lys Ala Thr Val Ile Arg His Gly Glu Thr Leu Arg Arg Thr Lys Glu
 305 310 315 320
 Glu Ile Asn Glu Leu Asn Arg Met Ile Gln Arg Leu Thr Ala Glu Val
 325 330 335
 Glu Asn Ala Lys Cys Gln Asn Ser Lys Leu Glu Ala Ala Val Ala Gln
 340 345 350
 Ser Glu Gln Gln Gly Glu Ala Ala Leu Ser Asp Ala Arg Cys Lys Leu
 355 360 365
 Ala Glu Leu Glu Gly Ala Leu Gln Lys Ala Lys Gln Asp Met Ala Cys
 370 375 380
 Leu Ile Arg Glu Tyr Gln Glu Val Met Asn Ser Lys Leu Gly Leu Asp
 385 390 395 400
 Ile Glu Ile Ala Thr Tyr Arg Arg Leu Leu Glu Gly Glu Glu Gln Arg
 405 410 415
 Leu Cys Glu Gly Val Gly Ser Val Asn Val Cys Val Ser Ser Ser Arg
 420 425 430
 Gly Gly Val Val Cys Gly Asp Leu Cys Ala Ser Thr Thr Ala Pro Val
 435 440 445
 Val Ser Thr Arg Val Ser Ser Val Pro Ser Asn Ser Asn Val Val Val
 450 455 460
 Gly Thr Thr Asn Ala Cys Ala Pro Ser Ala Arg Val Gly Val Cys Gly
 465 470 475 480
 Gly Ser Cys Lys Arg Cys
 485
 <210> 447
 <211> 493
 <212> PRT
 <213> Homo sapiens

<400> 447
 Met Thr Cys Gly Phe Asn Ser Ile Gly Cys Gly Phe Arg Pro Gly Asn
 1 5 10 15
 Phe Ser Cys Val Ser Ala Cys Gly Pro Arg Pro Ser Arg Cys Cys Ile
 20 25 30
 Thr Ala Ala Pro Tyr Arg Gly Ile Ser Cys Tyr Arg Gly Leu Thr Gly
 35 40 45
 Gly Phe Gly Ser His Ser Val Cys Gly Gly Phe Arg Ala Gly Ser Cys
 50 55 60
 Gly Arg Ser Phe Gly Tyr Arg Ser Gly Gly Val Cys Gly Pro Ser Pro
 65 70 75 80
 Pro Cys Ile Thr Thr Val Ser Val Asn Glu Ser Leu Leu Thr Pro Leu
 85 90 95
 Asn Leu Glu Ile Asp Pro Asn Ala Gln Cys Val Lys Gln Glu Glu Lys
 100 105 110

<213> Homo sapiens

Met	Ala	Ser	Gln	Ser	Cys	His	Ile	Ser	Ser	Gly	Cys	Gly	Val	Lys	Asn
1				5				10						15	
Phe	Ser	Ser	Arg	Ser	Ala	Thr	Val	Pro	Lys	Pro	Gly	Tyr	His	Ser	Cys
			20					25					30		
Val	Ser	Ala	Met	Ala	His	His	Gly	Val	Ser	Pro	Gly	Gly	Leu	Gly	Ser
		35					40					45			

Arg Arg Leu Gly Gly Phe Gly Ser Gln Ser Leu Cys Thr Val Gly Ser
 50 55 60
 Pro Arg Ile Ala Val Ser Cys Arg Trp Pro Leu His Ser Arg Gly Arg
 65 70 75 80
 Phe Gly Tyr Trp Ala Gly Gly Leu Cys Arg Pro Ser Pro Pro Arg Ile
 85 90 95
 Thr Ser Val Thr Ile Asn Glu Ser Leu Leu Met Pro Leu Asn Leu Glu
 100 105 110
 Ile Asp Pro Asn Ala Gln Cys Val Lys His Glu Glu Lys Glu His Ile
 115 120 125
 Arg Cys Leu Asn Lys Phe Ala Ala Phe Ile Asp Lys Val Gly Leu
 130 135 140
 <210> 449
 <211> 507
 <212> PRT
 <213> Homo sapiens

<400> 449
 Met Ser Cys Arg Ser Tyr Arg Ile Ser Ser Gly Cys Gly Val Thr Arg
 1 5 10 15
 Asn Phe Ser Ser Cys Ser Ala Val Ala Pro Lys Thr Gly Asn Arg Cys
 20 25 30
 Cys Ile Ser Ala Ala Pro Tyr Arg Gly Val Ser Cys Tyr Arg Gly Leu
 35 40 45
 Thr Gly Phe Gly Ser Arg Ser Leu Cys Asn Leu Gly Ser Cys Gly Pro
 50 55 60
 Arg Ile Ala Val Gly Gly Phe Arg Ala Gly Ser Cys Gly Arg Ser Phe
 65 70 75 80
 Gly Tyr Arg Ser Gly Gly Val Cys Gly Pro Ser Pro Pro Cys Ile Thr
 85 90 95
 Thr Val Ser Val Asn Glu Ser Leu Leu Thr Pro Leu Asn Leu Glu Ile
 100 105 110
 Asp Pro Asn Ala Gln Cys Val Lys Gln Glu Glu Lys Glu Gln Ile Lys
 115 120 125
 Ser Leu Asn Ser Arg Phe Ala Ala Phe Ile Asp Lys Val Arg Phe Leu
 130 135 140
 Glu Gln Gln Asn Lys Leu Leu Glu Thr Lys Trp Gln Phe Tyr Gln Asn
 145 150 155 160
 Gln Arg Cys Cys Glu Ser Asn Leu Glu Pro Leu Phe Ser Gly Tyr Ile
 165 170 175
 Glu Thr Leu Arg Arg Glu Ala Glu Cys Val Glu Ala Asp Ser Gly Arg
 180 185 190
 Leu Ala Ser Glu Leu Asn His Val Gln Glu Val Leu Glu Gly Tyr Lys
 195 200 205
 Lys Lys Tyr Glu Glu Glu Val Ala Leu Arg Ala Thr Ala Glu Asn Glu
 210 215 220
 Phe Val Val Leu Lys Lys Asp Val Asp Cys Ala Tyr Leu Arg Lys Ser
 225 230 235 240
 Asp Leu Glu Ala Asn Val Glu Ala Leu Val Glu Glu Ser Ser Phe Leu
 245 250 255
 Arg Arg Leu Tyr Glu Glu Glu Ile Arg Val Leu Gln Ala His Ile Ser
 260 265 270
 Asp Thr Ser Val Ile Val Lys Met Asp Asn Ser Arg Asp Leu Asn Met
 275 280 285
 Asp Cys Ile Ile Ala Glu Ile Lys Ala Gln Tyr Asp Asp Val Ala Ser
 290 295 300
 Arg Ser Arg Ala Glu Ala Glu Ser Trp Tyr Arg Ser Lys Cys Glu Glu
 305 310 315 320
 Met Lys Ala Thr Val Ile Arg His Gly Glu Thr Leu Arg Arg Thr Lys
 325 330 335

Glu Glu Ile Asn Glu Leu Asn Arg Met Ile Gln Arg Leu Thr Ala Glu
 340 345 350
 Ile Glu Asn Ala Lys Cys Gln Arg Ala Lys Leu Glu Ala Ala Val Ala
 355 360 365
 Glu Ala Glu Gln Gln Gly Glu Ala Ala Leu Ser Asp Ala Arg Cys Lys
 370 375 380
 Leu Ala Glu Leu Glu Gly Ala Leu Gln Lys Ala Lys Gln Asp Met Ala
 385 390 395 400
 Cys Leu Leu Lys Glu Tyr Gln Glu Val Met Asn Ser Lys Leu Gly Leu
 405 410 415
 Asp Ile Glu Ile Ala Thr Tyr Arg Arg Leu Leu Glu Gly Glu Glu His
 420 425 430
 Arg Leu Cys Glu Gly Val Gly Ser Val Asn Val Cys Val Ser Ser Ser
 435 440 445
 Arg Gly Gly Val Ser Cys Gly Gly Leu Ser Tyr Ser Thr Thr Pro Gly
 450 455 460
 Arg Gln Ile Thr Ser Gly Pro Ser Ala Ile Gly Gly Ser Ile Thr Val
 465 470 475 480
 Val Ala Pro Asp Ser Cys Ala Pro Cys Gln Pro Arg Ser Ser Ser Phe
 485 490 495
 Ser Cys Gly Ser Ser Arg Ser Val Arg Phe Ala
 500 505

<210> 450

<211> 600

<212> PRT

<213> Homo sapiens

<400> 450

Met Ser Cys Arg Ser Tyr Arg Val Ser Ser Gly His Arg Val Gly Asn
 1 5 10 15
 Phe Ser Ser Cys Ser Ala Met Thr Pro Gln Asn Leu Asn Arg Phe Arg
 20 25 30
 Ala Asn Ser Val Ser Cys Trp Ser Gly Pro Gly Phe Arg Gly Leu Gly
 35 40 45
 Ser Phe Gly Ser Arg Ser Val Ile Thr Phe Gly Ser Tyr Ser Pro Arg
 50 55 60
 Ile Ala Ala Val Gly Ser Arg Pro Ile His Cys Gly Val Arg Phe Gly
 65 70 75 80
 Ala Gly Cys Gly Met Gly Phe Gly Asp Gly Arg Gly Val Gly Leu Gly
 85 90 95
 Pro Arg Ala Asp Ser Cys Val Gly Leu Gly Phe Gly Ala Gly Ser Gly
 100 105 110
 Ile Gly Tyr Gly Phe Gly Gly Pro Gly Phe Gly Tyr Arg Val Gly Gly
 115 120 125
 Val Gly Val Pro Ala Ala Pro Ser Ile Thr Ala Val Thr Val Asn Lys
 130 135 140
 Ser Leu Leu Thr Pro Leu Asn Leu Glu Ile Asp Pro Asn Ala Gln Arg
 145 150 155 160
 Val Lys Lys Asp Glu Lys Glu Gln Ile Lys Thr Leu Asn Asn Lys Phe
 165 170 175
 Ala Ser Phe Ile Asp Lys Val Arg Phe Leu Glu Gln Gln Asn Lys Leu
 180 185 190
 Leu Glu Thr Lys Trp Ser Phe Leu Gln Glu Gln Lys Cys Ile Arg Ser
 195 200 205
 Asn Leu Glu Pro Leu Phe Glu Ser Tyr Ile Thr Asn Leu Arg Arg Gln
 210 215 220
 Leu Glu Val Leu Val Ser Asp Gln Ala Arg Leu Gln Ala Glu Arg Asn
 225 230 235 240
 His Leu Gln Asp Val Leu Glu Gly Phe Lys Lys Lys Tyr Glu Glu Glu
 245 250 255

Val Val Cys Arg Ala Asn Ala Glu Asn Glu Phe Val Ala Leu Lys Lys
 260 265 270
 Asp Val Asp Ala Ala Phe Met Asn Lys Ser Asp Leu Glu Ala Asn Val
 275 280 285
 Asp Thr Leu Thr Gln Glu Ile Asp Phe Leu Lys Thr Leu Tyr Met Glu
 290 295 300
 Glu Ile Gln Leu Leu Gln Ser His Ile Ser Glu Thr Ser Val Ile Val
 305 310 315 320
 Lys Met Asp Asn Ser Arg Asp Leu Asn Leu Asp Gly Ile Ile Ala Glu
 325 330 335
 Val Lys Ala Gln Tyr Glu Glu Val Ala Arg Arg Ser Arg Ala Asp Ala
 340 345 350
 Glu Ala Trp Tyr Gln Thr Lys Tyr Glu Glu Met Gln Val Thr Ala Gly
 355 360 365
 Gln His Cys Asp Asn Leu Arg Asn Ile Arg Asn Glu Ile Asn Glu Leu
 370 375 380
 Thr Arg Leu Ile Gln Arg Leu Lys Ala Glu Ile Glu His Ala Lys Ala
 385 390 395 400
 Gln Arg Ala Lys Leu Glu Ala Ala Val Ala Glu Ala Glu Gln Gln Gly
 405 410 415
 Glu Ala Thr Leu Ser Asp Ala Lys Cys Lys Leu Ala Asp Leu Glu Cys
 420 425 430
 Ala Leu Gln Gln Ala Lys Gln Asp Met Ala Arg Gln Leu Cys Glu Tyr
 435 440 445
 Gln Glu Leu Met Asn Ala Lys Leu Gly Leu Asp Ile Glu Ile Ala Thr
 450 455 460
 Tyr Arg Arg Leu Leu Glu Gly Glu Glu Ser Arg Leu Cys Glu Gly Val
 465 470 475 480
 Gly Pro Val Asn Ile Ser Val Ser Ser Ser Arg Gly Gly Leu Val Cys
 485 490 495
 Gly Pro Glu Pro Leu Val Ala Gly Ser Thr Leu Ser Arg Gly Gly Val
 500 505 510
 Thr Phe Ser Gly Ser Ser Ser Val Cys Ala Thr Ser Gly Val Leu Ala
 515 520 525
 Ser Cys Gly Pro Ser Leu Gly Gly Ala Arg Val Ala Pro Ala Thr Gly
 530 535 540
 Asp Leu Leu Ser Thr Gly Thr Arg Ser Gly Ser Met Leu Ile Ser Glu
 545 550 555 560
 Ala Cys Val Pro Ser Val Pro Cys Pro Leu Pro Thr Gln Gly Gly Phe
 565 570 575
 Ser Ser Cys Ser Gly Gly Arg Ser Ser Ser Val Arg Phe Val Ser Thr
 580 585 590
 Thr Thr Ser Cys Arg Thr Lys Tyr
 595 600

<210> 451

<211> 513

<212> PRT

<213> Homo sapiens

<400> 451

Met Ser Tyr His Ser Phe Gln Pro Gly Ser Arg Cys Gly Ser Gln Ser
 1 5 10 15
 Phe Ser Ser Tyr Ser Ala Val Met Pro Arg Met Val Thr His Tyr Ala
 20 25 30
 Val Ser Lys Gly Pro Cys Arg Pro Gly Gly Gly Arg Gly Leu Arg Ala
 35 40 45
 Leu Gly Cys Leu Gly Ser Arg Ser Leu Cys Asn Val Gly Phe Gly Arg
 50 55 60
 Pro Arg Val Ala Ser Arg Cys Gly Gly Thr Leu Pro Gly Phe Gly Tyr
 65 70 75 80

Arg Leu Gly Ala Thr Cys Gly Pro Ser Ala Cys Ile Thr Pro Val Thr
 85 90 95
 Ile Asn Glu Ser Leu Leu Val Pro Leu Ala Leu Glu Ile Asp Pro Thr
 100 105 110
 Val Gln Arg Val Lys Arg Asp Glu Lys Glu Gln Ile Lys Cys Leu Asn
 115 120 125
 Asn Arg Phe Ala Ser Phe Ile Asn Lys Val Arg Phe Leu Glu Gln Lys
 130 135 140
 Asn Lys Leu Leu Glu Thr Lys Trp Asn Phe Met Gln Gln Gln Arg Cys
 145 150 155 160
 Cys Gln Thr Asn Ile Glu Pro Ile Phe Glu Gly Tyr Ile Ser Ala Leu
 165 170 175
 Arg Arg Gln Leu Asp Cys Val Ser Gly Asp Arg Val Arg Leu Glu Ser
 180 185 190
 Glu Leu Cys Ser Leu Gln Ala Ala Leu Glu Gly Tyr Lys Lys Lys Tyr
 195 200 205
 Glu Glu Glu Leu Ser Leu Arg Pro Cys Val Glu Asn Glu Phe Val Ala
 210 215 220
 Leu Lys Lys Asp Val Asp Thr Ala Phe Leu Met Lys Ala Asp Leu Glu
 225 230 235 240
 Thr Asn Ala Glu Ala Leu Val Gln Glu Ile Asp Phe Leu Lys Ser Leu
 245 250 255
 Tyr Glu Glu Glu Ile Cys Leu Leu Gln Ser Gln Ile Ser Glu Thr Ser
 260 265 270
 Val Ile Val Lys Met Asp Asn Ser Arg Glu Leu Asp Val Asp Gly Ile
 275 280 285
 Ile Ala Glu Ile Lys Ala Gln Tyr Asp Asp Ile Ala Ser Arg Ser Lys
 290 295 300
 Ala Glu Ala Glu Ala Trp Tyr Gln Cys Arg Tyr Glu Glu Leu Arg Val
 305 310 315 320
 Thr Ala Gly Asn His Cys Asp Asn Leu Arg Asn Arg Lys Asn Glu Ile
 325 330 335
 Leu Glu Met Asn Lys Leu Ile Gln Arg Leu Gln Gln Glu Thr Glu Asn
 340 345 350
 Val Lys Ala Gln Arg Cys Lys Leu Glu Gly Ala Ile Ala Glu Ala Glu
 355 360 365
 Gln Gln Gly Glu Ala Ala Leu Asn Asp Ala Lys Cys Lys Leu Ala Gly
 370 375 380
 Leu Glu Glu Ala Leu Gln Lys Ala Lys Gln Asp Met Ala Cys Leu Leu
 385 390 395 400
 Lys Glu Tyr Gln Glu Val Met Asn Ser Lys Leu Gly Leu Asp Ile Glu
 405 410 415
 Ile Ala Thr Tyr Arg Arg Leu Leu Glu Gly Glu Glu His Arg Leu Cys
 420 425 430
 Glu Gly Ile Gly Pro Val Asn Ile Ser Val Ser Ser Ser Lys Gly Ala
 435 440 445
 Phe Leu Tyr Glu Pro Cys Gly Val Ser Thr Pro Val Leu Ser Thr Gly
 450 455 460
 Val Leu Arg Ser Asn Gly Gly Cys Ser Ile Val Gly Thr Gly Glu Leu
 465 470 475 480
 Tyr Val Pro Cys Glu Pro Gln Gly Leu Leu Ser Cys Gly Ser Gly Arg
 485 490 495
 Lys Ser Ser Met Thr Leu Gly Ala Gly Gly Ser Ser Pro Ser His Lys
 500 505 510
 His

<210> 452

<211> 85

<212> PRT

<213> Homo sapiens

<400> 452

Met Asp Ala Val Tyr Met Asn Lys Val Gly Leu Glu Ala Lys Val Asp
 1 5 10 15
 Ala Leu Met Glu Thr Asn Phe Leu Ser Thr Phe Tyr Lys Ala Val
 20 25 30
 Arg Val Pro Gly Ala Pro Ser Asn Arg Gly Ala Gly Gly Trp Val Leu
 35 40 45
 Glu Pro Gln Leu Gly Thr Glu Pro Val Gly Ser Phe Pro Gly Leu Leu
 50 55 60
 Ser Ala Pro Tyr Pro Thr Cys Val Leu Gln Gly Arg Cys His Phe Pro
 65 70 75 80
 Tyr His Arg Arg Lys
 85

<210> 453

<211> 564

<212> PRT

<213> Homo sapiens

<400> 453

Met Ala Ser Thr Ser Thr Thr Ile Arg Ser His Ser Ser Ser Arg Arg
 1 5 10 15
 Gly Phe Ser Ala Ser Ser Ala Arg Leu Pro Gly Val Ser Arg Ser Gly
 20 25 30
 Phe Ser Ser Ile Ser Val Ser Arg Ser Arg Gly Ser Gly Leu Gly
 35 40 45
 Gly Ala Cys Gly Gly Ala Gly Phe Gly Ser Arg Ser Leu Tyr Gly Leu
 50 55 60
 Gly Gly Ser Lys Arg Ile Ser Ile Gly Gly Gly Ser Cys Ala Ile Ser
 65 70 75 80
 Gly Gly Tyr Gly Ser Arg Ala Gly Gly Ser Tyr Gly Phe Gly Gly Ala
 85 90 95
 Gly Ser Gly Phe Gly Phe Gly Gly Gly Ala Gly Ile Gly Phe Gly Leu
 100 105 110
 Gly Gly Gly Ala Gly Leu Ala Gly Gly Phe Gly Gly Pro Gly Phe Pro
 115 120 125
 Val Cys Pro Pro Gly Gly Ile Gln Glu Val Thr Val Asn Gln Ser Leu
 130 135 140
 Leu Thr Pro Leu Asn Leu Gln Ile Asp Pro Ala Ile Gln Arg Val Arg
 145 150 155 160
 Ala Glu Glu Arg Glu Gln Ile Lys Thr Leu Asn Asn Lys Phe Ala Ser
 165 170 175
 Phe Ile Asp Lys Val Arg Phe Leu Glu Gln Gln Asn Lys Val Leu Asp
 180 185 190
 Thr Lys Trp Thr Leu Leu Gln Glu Gln Gly Thr Lys Thr Val Arg Gln
 195 200 205
 Asn Leu Glu Pro Leu Phe Glu Gln Tyr Ile Asn Asn Leu Arg Arg Gln
 210 215 220
 Leu Asp Ser Ile Val Gly Glu Arg Gly Arg Leu Asp Ser Glu Leu Arg
 225 230 235 240
 Asn Met Gln Asp Leu Val Glu Asp Leu Lys Asn Lys Tyr Glu Asp Glu
 245 250 255
 Ile Asn Lys Arg Thr Ala Ala Glu Asn Glu Phe Val Thr Leu Lys Lys
 260 265 270
 Asp Val Asp Ala Ala Tyr Met Asn Lys Val Glu Leu Gln Ala Lys Ala
 275 280 285
 Asp Thr Leu Thr Asp Glu Ile Asn Phe Leu Arg Ala Leu Tyr Asp Ala
 290 295 300
 Glu Leu Ser Gln Met Gln Thr His Ile Ser Asp Thr Ser Val Val Leu
 305 310 315 320
 Ser Met Asp Asn Asn Arg Asn Leu Asp Leu Asp Ser Ile Ile Ala Glu
 325 330 335

Val Lys Ala Gln Tyr Glu Glu Ile Ala Gln Arg Ser Arg Ala Glu Ala
 340 345 350
 Glu Ser Trp Tyr Gln Thr Lys Tyr Glu Glu Leu Gln Val Thr Ala Gly
 355 360 365
 Arg His Gly Asp Asp Leu Arg Asn Thr Lys Gln Glu Ile Ala Glu Ile
 370 375 380
 Asn Arg Met Ile Gln Arg Leu Arg Ser Glu Ile Asp His Val Lys Lys
 385 390 395 400
 Gln Cys Ala Asn Leu Gln Ala Ala Ile Ala Asp Ala Glu Gln Arg Gly
 405 410 415
 Glu Met Ala Leu Lys Asp Ala Lys Asn Lys Leu Glu Gly Leu Glu Asp
 420 425 430
 Ala Leu Gln Lys Ala Lys Gln Asp Leu Ala Arg Leu Leu Lys Glu Tyr
 435 440 445
 Gln Glu Leu Met Asn Val Lys Leu Ala Leu Asp Val Glu Ile Ala Thr
 450 455 460
 Tyr Arg Lys Leu Leu Glu Gly Glu Glu Cys Arg Leu Asn Gly Glu Gly
 465 470 475 480
 Val Gly Gln Val Asn Ile Ser Val Val Gln Ser Thr Val Ser Ser Gly
 485 490 495
 Tyr Gly Gly Ala Ser Gly Val Gly Ser Gly Leu Gly Leu Gly Gly Gly
 500 505 510
 Ser Ser Tyr Ser Tyr Gly Ser Gly Leu Gly Val Gly Gly Gly Phe Ser
 515 520 525
 Ser Ser Ser Gly Arg Ala Thr Gly Gly Gly Leu Ser Ser Val Gly Gly
 530 535 540
 Gly Ser Ser Thr Ile Lys Tyr Thr Thr Thr Ser Ser Ser Ser Arg Lys
 545 550 555 560
 Ser Tyr Lys His

<210> 454

<211> 564

<212> PRT

<213> Homo sapiens

<400> 454

Met Ala Ser Thr Ser Thr Thr Ile Arg Ser His Ser Ser Ser Arg Arg
 1 5 10 15
 Gly Phe Ser Ala Asn Ser Ala Arg Leu Pro Gly Val Ser Arg Ser Gly
 20 25 30
 Phe Ser Ser Ile Ser Val Ser Arg Ser Arg Gly Ser Gly Gly Leu Gly
 35 40 45
 Gly Ala Cys Gly Gly Ala Gly Phe Gly Ser Arg Ser Leu Tyr Gly Leu
 50 55 60
 Gly Gly Ser Lys Arg Ile Ser Ile Gly Gly Gly Ser Cys Ala Ile Ser
 65 70 75 80
 Gly Gly Tyr Gly Ser Arg Ala Arg Gly Ser Tyr Gly Phe Gly Gly Ala
 85 90 95
 Gly Ser Gly Phe Gly Phe Gly Gly Gly Ala Gly Ile Gly Phe Asp Leu
 100 105 110
 Gly Gly Gly Ala Gly Leu Ala Gly Phe Gly Gly Pro Gly Phe Pro
 115 120 125
 Val Cys Pro Pro Gly Gly Ile Gln Glu Val Thr Val Asn Gln Ser Leu
 130 135 140
 Leu Thr Pro Leu Asn Leu Gln Ile Asp Pro Ala Ile Gln Arg Val Arg
 145 150 155 160
 Ala Glu Glu Arg Glu Gln Ile Lys Thr Leu Asn Asn Lys Phe Ala Ser
 165 170 175
 Phe Ile Asp Lys Val Arg Phe Leu Glu Gln Gln Asn Lys Val Leu Asp
 180 185 190

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Thr Lys Trp Thr Leu Leu Gln Glu Gln Gly Thr Lys Thr Val Arg Gln
195 200 205
Asn Leu Glu Pro Leu Phe Glu Gln Tyr Ile Asn Asn Leu Arg Arg Gln
210 215 220
Leu Asp Asn Ile Val Gly Glu Arg Gly Arg Leu Asp Ser Glu Leu Arg
225 230 235 240
Asn Met Gln Asp Leu Val Glu Asp Leu Lys Asn Lys Tyr Glu Asp Glu
245 250 255
Ile Asn Lys Arg Thr Ala Ala Glu Asn Glu Phe Val Thr Leu Lys Lys
260 265 270
Asp Val Asp Ala Ala Tyr Met Asn Lys Val Glu Leu Gln Ala Lys Ala
275 280 285
Asp Thr Leu Thr Asp Glu Ile Asn Phe Leu Arg Ala Leu Tyr Asp Ala
290 295 300
Glu Leu Ser Gln Met Gln Thr His Ile Ser Asp Thr Ser Val Val Leu
305 310 315 320
Ser Met Asp Asn Asn Arg Asn Leu Asp Leu Asp Ser Ile Ile Ala Glu
325 330 335
Val Lys Ala Gln Tyr Glu Glu Ile Ala Gln Arg Ser Arg Ala Glu Ala
340 345 350
Glu Ser Trp Tyr Gln Thr Lys Tyr Glu Glu Leu Gln Val Thr Ala Gly
355 360 365
Arg His Gly Asp Asp Leu Arg Asn Thr Lys Gln Glu Ile Ala Glu Ile
370 375 380
Asn Arg Met Ile Gln Arg Leu Arg Ser Glu Ile Asp His Val Lys Lys
385 390 395 400
Gln Cys Ala Ser Leu Gln Ala Ala Ile Ala Asp Ala Glu Gln Arg Gly
405 410 415
Glu Met Ala Leu Lys Asp Ala Lys Asn Lys Leu Glu Gly Leu Glu Asp
420 425 430
Ala Leu Gln Lys Ala Lys Gln Asp Leu Ala Arg Leu Leu Lys Glu Tyr
435 440 445
Gln Glu Leu Met Asn Val Lys Leu Ala Leu Asp Val Glu Ile Ala Thr
450 455 460
Tyr Arg Lys Leu Leu Glu Gly Glu Glu Cys Arg Leu Asn Gly Glu Gly
465 470 475 480
Ile Gly Gln Val Asn Val Ser Val Val Gln Ser Thr Ile Ser Ser Gly
485 490 495
Tyr Gly Gly Ala Ser Gly Val Gly Ser Gly Leu Gly Leu Gly Gly Gly
500 505 510
Ser Ser Tyr Ser Tyr Gly Ser Gly Leu Gly Ile Gly Gly Gly Phe Ser
515 520 525
Ser Ser Ser Gly Arg Ala Ile Gly Gly Gly Leu Ser Ser Val Gly Gly
530 535 540
Gly Ser Ser Thr Ile Lys Tyr Thr Thr Thr Ser Ser Ser Ser Arg Lys
545 550 555 560
Ser Tyr Lys His

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<210> 455

<211> 564

<212> PRT

<213> Homo sapiens

<400> 455

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Met Ala Ser Thr Ser Thr Thr Ile Arg Ser His Ser Ser Ser Arg Arg
1 5 10 15
Gly Phe Ser Ala Asn Ser Ala Arg Leu Pro Gly Val Ser Arg Ser Gly
20 25 30
Phe Ser Ser Ile Ser Val Ser Arg Ser Arg Gly Ser Gly Gly Leu Gly
35 40 45

```

Gly Ala Cys Gly Gly Ala Gly Phe Gly Ser Arg Ser Leu Tyr Gly Leu
 50 55 60
 Gly Gly Ser Lys Arg Ile Ser Ile Gly Gly Gly Ser Cys Ala Ile Ser
 65 70 75 80
 Gly Gly Tyr Gly Ser Arg Ala Arg Ala Ser Tyr Gly Phe Gly Gly Ala
 85 90 95
 Gly Ser Gly Phe Gly Phe Gly Gly Gly Ala Gly Ile Gly Phe Asp Leu
 100 105 110
 Gly Gly Gly Ala Gly Leu Ala Gly Gly Phe Gly Gly Pro Gly Phe Pro
 115 120 125
 Val Cys Pro Pro Gly Gly Ile Gln Glu Val Thr Val Asn Gln Ser Leu
 130 135 140
 Leu Thr Pro Leu Asn Leu Gln Ile Asp Pro Ala Ile Gln Arg Val Arg
 145 150 155 160
 Ala Glu Glu Arg Glu Gln Ile Lys Thr Leu Asn Asn Lys Phe Ala Ser
 165 170 175
 Phe Ile Asp Lys Val Arg Phe Leu Glu Gln Gln Asn Lys Val Leu Glu
 180 185 190
 Thr Lys Trp Thr Leu Leu Gln Glu Gln Gly Thr Lys Thr Val Arg Gln
 195 200 205
 Asn Leu Glu Pro Leu Phe Glu Gln Tyr Ile Asn Asn Leu Arg Arg Gln
 210 215 220
 Leu Asp Ser Ile Val Gly Glu Arg Gly Arg Leu Asp Ser Glu Leu Arg
 225 230 235 240
 Gly Met Gln Asp Leu Val Glu Asp Phe Lys Asn Lys Tyr Glu Asp Glu
 245 250 255
 Ile Asn Lys Arg Thr Ala Ala Glu Asn Glu Phe Val Thr Leu Lys Lys
 260 265 270
 Asp Val Asp Ala Ala Tyr Met Asn Lys Val Glu Leu Gln Ala Lys Ala
 275 280 285
 Asp Thr Leu Thr Asp Glu Ile Asn Phe Leu Arg Ala Leu Tyr Asp Ala
 290 295 300
 Glu Leu Ser Gln Met Gln Thr His Ile Ser Asp Thr Ser Val Val Leu
 305 310 315 320
 Ser Met Asp Asn Asn Arg Asn Leu Asp Leu Asp Ser Ile Ile Ala Glu
 325 330 335
 Val Lys Ala Gln Tyr Glu Glu Ile Ala Gln Arg Ser Arg Ala Glu Ala
 340 345 350
 Glu Ser Trp Tyr Gln Thr Lys Tyr Glu Glu Leu Gln Val Thr Ala Gly
 355 360 365
 Arg His Gly Asp Asp Leu Arg Asn Thr Lys Gln Glu Ile Ala Glu Ile
 370 375 380
 Asn Arg Met Ile Gln Arg Leu Arg Ser Glu Ile Asp His Val Lys Lys
 385 390 395 400
 Gln Cys Ala Asn Leu Gln Ala Ala Ile Ala Asp Ala Glu Gln Arg Gly
 405 410 415
 Glu Met Ala Leu Lys Asp Ala Lys Asn Lys Leu Glu Gly Leu Glu Asp
 420 425 430
 Ala Leu Gln Lys Ala Lys Gln Asp Leu Ala Arg Leu Leu Lys Glu Tyr
 435 440 445
 Gln Glu Leu Met Asn Val Lys Leu Ala Leu Asp Val Glu Ile Ala Thr
 450 455 460
 Tyr Arg Lys Leu Leu Glu Gly Glu Glu Cys Arg Leu Asn Gly Glu Gly
 465 470 475 480
 Val Gly Gln Val Asn Ile Ser Val Val Gln Ser Thr Val Ser Ser Gly
 485 490 495
 Tyr Gly Gly Ala Ser Gly Val Gly Ser Gly Leu Gly Leu Gly Gly Gly
 500 505 510
 Ser Ser Tyr Ser Tyr Gly Ser Gly Leu Gly Val Gly Gly Gly Phe Ser
 515 520 525
 Ser Ser Ser Gly Arg Ala Ile Gly Gly Gly Leu Ser Ser Val Gly Gly
 530 535 540
 Gly Ser Ser Thr Ile Lys Tyr Thr Thr Thr Ser Ser Ser Ser Arg Lys
 545 550 555 560
 Ser Tyr Lys His

<210> 456
 <211> 564
 <212> PRT
 <213> Homo sapiens

<400> 456
 Met Ala Ser Thr Ser Thr Thr Ile Arg Ser His Ser Ser Ser Arg Arg
 1 5 10 15
 Gly Phe Ser Ala Asn Ser Ala Arg Leu Pro Gly Val Ser Arg Ser Gly
 20 25 30
 Phe Ser Ser Val Ser Val Ser Arg Ser Arg Gly Ser Gly Gly Leu Gly
 35 40 45
 Gly Ala Cys Gly Gly Ala Gly Phe Gly Ser Arg Ser Leu Tyr Gly Leu
 50 55 60
 Gly Gly Ser Lys Arg Ile Ser Ile Gly Gly Gly Ser Cys Ala Ile Ser
 65 70 75 80
 Gly Gly Tyr Gly Ser Arg Ala Gly Gly Ser Tyr Gly Phe Gly Gly Ala
 85 90 95
 Gly Ser Gly Phe Gly Phe Gly Gly Gly Ala Gly Ile Gly Phe Gly Leu
 100 105 110
 Gly Gly Gly Ala Gly Leu Ala Gly Gly Phe Gly Gly Pro Gly Phe Pro
 115 120 125
 Val Cys Pro Pro Gly Gly Ile Gln Glu Val Thr Val Asn Gln Ser Leu
 130 135 140
 Leu Thr Pro Leu Asn Leu Gln Ile Asp Pro Thr Ile Gln Arg Val Arg
 145 150 155 160
 Ala Glu Glu Arg Glu Gln Ile Lys Thr Leu Asn Asn Lys Phe Ala Ser
 165 170 175
 Phe Ile Asp Lys Val Arg Phe Leu Glu Gln Gln Asn Lys Val Leu Glu
 180 185 190
 Thr Lys Trp Thr Leu Leu Gln Glu Gln Gly Thr Lys Thr Val Arg Gln
 195 200 205
 Asn Leu Glu Pro Leu Phe Glu Gln Tyr Ile Asn Asn Leu Arg Arg Gln
 210 215 220
 Leu Asp Ser Ile Val Gly Glu Arg Gly Arg Leu Asp Ser Glu Leu Arg
 225 230 235 240
 Gly Met Gln Asp Leu Val Glu Asp Phe Lys Asn Lys Tyr Glu Asp Glu
 245 250 255
 Ile Asn Lys Arg Thr Ala Ala Glu Asn Glu Phe Val Thr Leu Lys Lys
 260 265 270
 Asp Val Asp Ala Ala Tyr Met Asn Lys Val Glu Leu Gln Ala Lys Ala
 275 280 285
 Asp Thr Leu Thr Asp Glu Ile Asn Phe Leu Arg Ala Leu Tyr Asp Ala
 290 295 300
 Glu Leu Ser Gln Met Gln Thr His Ile Ser Asp Thr Ser Val Val Leu
 305 310 315 320
 Ser Met Asp Asn Asn Arg Asn Leu Asp Leu Asp Ser Ile Ile Ala Glu
 325 330 335
 Val Lys Ala Gln Tyr Glu Glu Ile Ala Gln Arg Ser Arg Ala Glu Ala
 340 345 350
 Glu Ser Trp Tyr Gln Thr Lys Tyr Glu Glu Leu Gln Val Thr Ala Gly
 355 360 365
 Arg His Gly Asp Asp Leu Arg Asn Thr Lys Gln Glu Ile Ala Glu Ile
 370 375 380
 Asn Arg Met Ile Gln Arg Leu Arg Ser Glu Ile Asp His Val Lys Lys
 385 390 395 400
 Gln Cys Ala Asn Leu Gln Ala Ala Ile Ala Asp Ala Glu Gln Arg Gly
 405 410 415
 Glu Met Ala Leu Lys Asp Ala Lys Asn Lys Leu Glu Gly Leu Glu Asp
 420 425 430

Ala Leu Gln Lys Ala Lys Gln Asp Leu Ala Arg Leu Leu Lys Glu Tyr
 435 440 445
 Gln Glu Leu Met Asn Val Lys Leu Ala Leu Asp Val Glu Ile Ala Thr
 450 455 460
 Tyr Arg Lys Leu Leu Glu Gly Glu Glu Cys Arg Leu Asn Gly Glu Gly
 465 470 475 480
 Val Gly Gln Val Asn Ile Ser Val Val Gln Ser Thr Val Ser Ser Gly
 485 490 495
 Tyr Gly Gly Ala Ser Gly Val Gly Ser Gly Leu Gly Leu Gly Gly Gly
 500 505 510
 Ser Ser Tyr Ser Tyr Gly Ser Gly Leu Gly Val Gly Gly Phe Ser
 515 520 525
 Ser Ser Ser Gly Arg Ala Ile Gly Gly Gly Leu Ser Ser Val Gly Gly
 530 535 540
 Gly Ser Ser Thr Ile Lys Tyr Thr Thr Thr Ser Ser Ser Ser Arg Lys
 545 550 555 560
 Ser Tyr Lys His

<210> 457

<211> 590

<212> PRT

<213> Homo sapiens

<400> 457

Met Ser Arg Gln Ser Ser Val Ser Phe Arg Ser Gly Gly Ser Arg Ser
 1 5 10 15
 Phe Ser Thr Ala Ser Ala Ile Thr Pro Ser Val Ser Arg Thr Ser Phe
 20 25 30
 Thr Ser Val Ser Arg Ser Gly Gly Gly Gly Gly Gly Phe Gly Arg
 35 40 45
 Val Ser Leu Ala Gly Ala Cys Gly Val Gly Gly Tyr Gly Ser Arg Ser
 50 55 60
 Leu Tyr Asn Leu Gly Gly Ser Lys Arg Ile Ser Ile Ser Thr Arg Gly
 65 70 75 80
 Gly Ser Phe Arg Asn Arg Phe Gly Ala Gly Ala Gly Gly Gly Tyr Gly
 85 90 95
 Phe Gly Gly Gly Ala Gly Ser Gly Phe Gly Phe Gly Gly Gly Ala Gly
 100 105 110
 Gly Gly Phe Gly Leu Gly Gly Gly Ala Gly Phe Gly Gly Gly Phe Gly
 115 120 125
 Gly Pro Gly Phe Pro Val Cys Pro Pro Gly Gly Ile Gln Glu Val Thr
 130 135 140
 Val Asn Gln Ser Leu Leu Thr Pro Leu Asn Leu Gln Ile Asp Pro Ser
 145 150 155 160
 Ile Gln Arg Val Arg Thr Glu Glu Arg Glu Gln Ile Lys Thr Leu Asn
 165 170 175
 Asn Lys Phe Ala Ser Phe Ile Asp Lys Val Arg Phe Leu Glu Gln Gln
 180 185 190
 Asn Lys Val Leu Asp Thr Lys Trp Thr Leu Leu Gln Glu Gln Gly Thr
 195 200 205
 Lys Thr Val Arg Gln Asn Leu Glu Pro Leu Phe Glu Gln Tyr Ile Asn
 210 215 220
 Asn Leu Arg Arg Gln Leu Asp Ser Ile Val Gly Glu Arg Gly Arg Leu
 225 230 235 240
 Asp Ser Glu Leu Arg Asn Met Gln Asp Leu Val Glu Asp Phe Lys Asn
 245 250 255
 Lys Tyr Glu Asp Glu Ile Asn Lys Arg Thr Thr Ala Glu Asn Glu Phe
 260 265 270
 Val Met Leu Lys Lys Asp Val Asp Ala Ala Tyr Met Asn Lys Val Glu
 275 280 285

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Leu Glu Ala Lys Val Asp Ala Leu Met Asp Glu Ile Asn Phe Met Lys
 290          295          300
Met Phe Phe Asp Ala Glu Leu Ser Gln Met Gln Thr His Val Ser Asp
305          310          315          320
Thr Ser Val Val Leu Ser Met Asp Asn Asn Arg Asn Leu Asp Leu Asp
          325          330          335
Ser Ile Ile Ala Glu Val Lys Ala Gln Tyr Glu Glu Ile Ala Asn Arg
          340          345          350
Ser Arg Thr Glu Ala Glu Ser Trp Tyr Gln Thr Lys Tyr Glu Glu Leu
          355          360          365
Gln Gln Thr Ala Gly Arg His Gly Asp Asp Leu Arg Asn Thr Lys His
          370          375          380
Glu Ile Thr Glu Met Asn Arg Met Ile Gln Arg Leu Arg Ala Glu Ile
385          390          395          400
Asp Asn Val Lys Lys Gln Cys Ala Asn Leu Gln Asn Ala Ile Ala Asp
          405          410          415
Ala Glu Gln Arg Gly Glu Leu Ala Leu Lys Asp Ala Arg Asn Lys Leu
          420          425          430
Ala Glu Leu Glu Glu Ala Leu Gln Lys Ala Lys Gln Asp Met Ala Arg
          435          440          445
Leu Leu Arg Glu Tyr Gln Glu Leu Met Asn Thr Lys Leu Ala Leu Asp
          450          455          460
Val Glu Ile Ala Thr Tyr Arg Lys Leu Leu Glu Gly Glu Glu Cys Arg
465          470          475          480
Leu Ser Gly Glu Gly Val Gly Pro Val Asn Ile Ser Val Val Thr Ser
          485          490          495
Ser Val Ser Ser Gly Tyr Gly Ser Gly Ser Gly Tyr Gly Gly Leu
          500          505          510
Gly Gly Gly Leu Gly Gly Gly Leu Gly Gly Gly Leu Ala Gly Gly Ser
          515          520          525
Ser Gly Ser Tyr Tyr Ser Ser Ser Ser Gly Gly Val Gly Leu Gly Gly
          530          535          540
Gly Leu Ser Val Gly Gly Ser Gly Phe Ser Ala Ser Ser Gly Arg Gly
545          550          555          560
Leu Gly Val Gly Phe Gly Ser Gly Gly Gly Ser Ser Ser Ser Val Lys
          565          570          575
Phe Val Ser Thr Thr Ser Ser Ser Arg Lys Ser Phe Lys Ser
          580          585          590

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<210> 458

<211> 523

<212> PRT

<213> Homo sapiens

<400> 458

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Met Ser Arg Gln Phe Thr Cys Lys Ser Gly Ala Ala Ala Lys Gly Gly
 1          5          10          15
Phe Ser Gly Cys Ser Ala Val Leu Ser Gly Gly Ser Ser Ser Ser Phe
          20          25          30
Arg Ala Gly Ser Lys Gly Leu Ser Gly Gly Phe Gly Ser Arg Ser Leu
          35          40          45
Tyr Ser Leu Gly Gly Val Arg Ser Leu Asn Val Ala Ser Gly Ser Gly
          50          55          60
Lys Ser Gly Gly Tyr Gly Phe Gly Arg Gly Arg Ala Ser Gly Phe Ala
65          70          75          80
Gly Ser Met Phe Gly Ser Val Ala Leu Gly Pro Val Cys Pro Thr Val
          85          90          95
Cys Pro Pro Gly Gly Ile His Gln Val Thr Val Asn Glu Ser Leu Leu
          100          105          110
Ala Pro Leu Asn Val Glu Leu Asp Pro Glu Ile Gln Lys Val Arg Ala
          115          120          125

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Gln Glu Arg Glu Gln Ile Lys Ala Leu Asn Asn Lys Phe Ala Ser Phe
 130 135 140
 Ile Asp Lys Val Arg Phe Leu Glu Gln Gln Asn Gln Val Leu Glu Thr
 145 150 155 160
 Lys Trp Glu Leu Leu Gln Gln Leu Asp Leu Asn Asn Cys Lys Asn Asn
 165 170 175
 Leu Glu Pro Ile Leu Glu Gly Tyr Ile Ser Asn Leu Arg Lys Gln Leu
 180 185 190
 Glu Thr Leu Ser Gly Asp Arg Val Arg Leu Asp Ser Glu Leu Arg Asn
 195 200 205
 Val Arg Asp Val Val Glu Asp Tyr Lys Lys Arg Tyr Glu Glu Glu Ile
 210 215 220
 Asn Lys Arg Thr Ala Ala Glu Asn Glu Phe Val Leu Leu Lys Lys Asp
 225 230 235 240
 Val Asp Ala Ala Tyr Ala Asn Lys Val Glu Leu Gln Ala Lys Val Glu
 245 250 255
 Ser Met Asp Gln Glu Ile Lys Phe Phe Arg Cys Leu Phe Glu Ala Glu
 260 265 270
 Ile Thr Gln Ile Gln Ser His Ile Ser Asp Met Ser Val Ile Leu Ser
 275 280 285
 Met Asp Asn Asn Arg Asn Leu Asp Leu Asp Ser Ile Ile Asp Glu Val
 290 295 300
 Arg Thr Gln Tyr Glu Glu Ile Ala Leu Lys Ser Lys Ala Glu Ala Glu
 305 310 315 320
 Ala Leu Tyr Gln Thr Lys Phe Gln Glu Leu Gln Leu Ala Ala Gly Arg
 325 330 335
 His Gly Asp Asp Leu Lys Asn Thr Lys Asn Glu Ile Ser Glu Leu Thr
 340 345 350
 Arg Leu Ile Gln Arg Ile Arg Ser Glu Ile Glu Asn Val Lys Lys Gln
 355 360 365
 Ala Ser Asn Leu Glu Thr Ala Ile Ala Asp Ala Glu Gln Arg Gly Asp
 370 375 380
 Asn Ala Leu Lys Asp Ala Arg Ala Lys Leu Asp Glu Leu Glu Gly Ala
 385 390 395 400
 Leu His Gln Ala Lys Glu Glu Leu Ala Arg Met Leu Arg Glu Tyr Gln
 405 410 415
 Glu Leu Met Ser Leu Lys Leu Ala Leu Asp Met Glu Ile Ala Thr Tyr
 420 425 430
 Arg Lys Leu Leu Glu Ser Glu Glu Cys Arg Met Ser Gly Glu Phe Pro
 435 440 445
 Ser Pro Val Ser Ile Ser Ile Ile Ser Ser Thr Ser Gly Gly Ser Val
 450 455 460
 Tyr Gly Phe Arg Pro Ser Met Val Ser Gly Gly Tyr Val Ala Asn Ser
 465 470 475 480
 Ser Asn Cys Ile Ser Gly Val Cys Ser Val Arg Gly Gly Glu Gly Arg
 485 490 495
 Ser Arg Gly Ser Ala Asn Asp Tyr Lys Asp Thr Leu Gly Lys Gly Ser
 500 505 510
 Ser Leu Ser Ala Pro Ser Lys Lys Thr Ser Arg
 515 520
 <210> 459
 <211> 529
 <212> PRT
 <213> Homo sapiens
 <400> 459
 Met Ser Arg Gln Leu Asn Ile Lys Ser Ser Gly Asp Lys Gly Asn Phe
 1 5 10 15
 Ser Val His Ser Ala Val Val Pro Arg Lys Ala Val Gly Ser Leu Ala
 20 25 30

Ser Tyr Cys Ala Ala Gly Arg Gly Ala Gly Ala Gly Phe Gly Ser Arg
 35 40 45
 Ser Leu Tyr Ser Leu Gly Gly Asn Arg Arg Ile Ser Phe Asn Val Ala
 50 55 60
 Gly Gly Gly Val Arg Ala Gly Gly Tyr Gly Phe Arg Pro Gly Ser Gly
 65 70 75 80
 Tyr Gly Gly Gly Arg Ala Ser Gly Phe Ala Gly Ser Met Phe Gly Ser
 85 90 95
 Val Ala Leu Gly Pro Ala Cys Leu Ser Val Cys Pro Pro Gly Gly Ile
 100 105 110
 His Gln Val Thr Val Asn Lys Ser Leu Leu Ala Pro Leu Asn Val Glu
 115 120 125
 Leu Asp Pro Glu Ile Gln Lys Val Arg Ala Gln Glu Arg Glu Gln Ile
 130 135 140
 Lys Val Leu Asn Asp Lys Phe Ala Ser Phe Ile Asp Lys Val Arg Phe
 145 150 155 160
 Leu Glu Gln Gln Asn Gln Val Leu Glu Thr Lys Trp Glu Leu Leu Gln
 165 170 175
 Gln Leu Asp Leu Asn Asn Cys Lys Lys Asn Leu Glu Pro Ile Leu Glu
 180 185 190
 Gly Tyr Ile Ser Asn Leu Arg Lys Gln Leu Glu Thr Leu Ser Gly Asp
 195 200 205
 Arg Val Arg Leu Asp Ser Glu Leu Arg Ser Met Arg Asp Leu Val Glu
 210 215 220
 Asp Tyr Lys Lys Arg Tyr Glu Val Glu Ile Asn Arg Arg Thr Thr Ala
 225 230 235 240
 Glu Asn Glu Phe Val Val Leu Lys Lys Asp Ala Asp Ala Tyr Ala
 245 250 255
 Val Lys Val Glu Leu Gln Ala Lys Val Asp Ser Leu Asp Lys Asp Ile
 260 265 270
 Lys Phe Leu Lys Cys Leu Tyr Asp Ala Glu Ile Ala Gln Ile Gln Thr
 275 280 285
 His Ala Ser Glu Thr Ser Val Ile Leu Ser Met Asp Asn Asn Arg Asp
 290 295 300
 Leu Asp Leu Asp Ser Ile Ile Ala Glu Val Arg Met His Tyr Glu Glu
 305 310 315 320
 Ile Ala Leu Lys Ser Lys Ala Glu Ala Glu Ala Leu Tyr Gln Thr Lys
 325 330 335
 Ile Gln Glu Leu Gln Leu Ala Ala Ser Arg His Gly Asp Asp Leu Lys
 340 345 350
 His Thr Arg Ser Glu Met Val Glu Leu Asn Arg Leu Ile Gln Arg Ile
 355 360 365
 Arg Cys Glu Ile Gly Asn Val Lys Lys Gln Arg Ala Ser Leu Glu Thr
 370 375 380
 Ala Ile Ala Asp Ala Glu Gln Arg Gly Asp Asn Ala Leu Lys Asp Ala
 385 390 395 400
 Gln Ala Lys Leu Asp Glu Leu Glu Gly Ala Leu His Gln Ala Lys Glu
 405 410 415
 Glu Leu Ala Arg Met Leu Arg Glu Tyr Gln Glu Leu Met Ser Leu Lys
 420 425 430
 Leu Ala Leu Asp Met Glu Ile Ala Thr Tyr Arg Lys Leu Leu Glu Gly
 435 440 445
 Glu Glu Cys Arg Met Ser Gly Glu Asn Pro Ser Ser Val Ser Ile Ser
 450 455 460
 Val Ile Ser Ser Ser Ser Tyr Ser Tyr His His Pro Ser Ser Ala Gly
 465 470 475 480
 Val Asp Leu Gly Ala Ser Ala Val Ala Gly Ser Ser Gly Ser Thr Gln
 485 490 495
 Ser Gly Gln Thr Lys Thr Thr Glu Ala Arg Gly Gly Asp Leu Lys Asp
 500 505 510
 Thr Gln Gly Lys Ser Thr Pro Ala Ser Ile Pro Ala Arg Lys Ala Thr
 515 520 525
 Arg

<211> 511

<212> PRT

<213> Homo sapiens

<400> 460

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Met Ser Arg Gln Leu Thr His Phe Pro Arg Gly Glu Arg Leu Gly Phe
1          5          10          15
Ser Gly Cys Ser Ala Val Leu Ser Gly Ile Gly Ser Ser Ser Ala
20          25          30
Ser Phe Arg Ala Arg Val Lys Gly Ser Ala Ser Phe Gly Ser Lys Ser
35          40          45
Leu Ser Cys Leu Gly Gly Ser Arg Ser Leu Ala Leu Ser Ala Ala Ala
50          55          60
Arg Arg Gly Gly Gly Arg Leu Gly Gly Phe Val Gly Thr Ala Phe Gly
65          70          75          80
Ser Ala Gly Leu Gly Pro Lys Cys Pro Ser Val Cys Pro Pro Gly Gly
85          90          95
Ile Pro Gln Val Thr Val Asn Lys Ser Leu Leu Ala Pro Leu Asn Val
100         105         110
Glu Met Asp Pro Glu Ile Gln Arg Val Arg Ala Gln Glu Arg Glu Gln
115         120         125
Ile Lys Ala Leu Asn Asn Lys Phe Ala Ser Phe Ile Asp Lys Val Arg
130         135         140
Phe Leu Glu Gln Gln Asn Gln Val Leu Glu Thr Lys Trp Asn Leu Leu
145         150         155         160
Gln Gln Leu Asp Leu Asn Asn Cys Arg Lys Asn Leu Glu Pro Ile Tyr
165         170         175
Glu Gly Tyr Ile Ser Asn Leu Gln Lys Gln Leu Glu Met Leu Ser Gly
180         185         190
Asp Gly Val Arg Leu Asp Ser Glu Leu Arg Asn Met Gln Asp Leu Val
195         200         205
Glu Asp Tyr Lys Lys Arg Tyr Glu Val Glu Ile Asn Arg Arg Thr Ala
210         215         220
Ala Glu Asn Glu Phe Val Val Leu Lys Lys Asp Val Asp Ala Ala Tyr
225         230         235         240
Met Asn Lys Val Glu Leu Gln Ala Lys Val Asp Ser Leu Thr Asp Glu
245         250         255
Ile Lys Phe Phe Lys Cys Leu Tyr Glu Gly Glu Ile Thr Gln Ile Gln
260         265         270
Ser His Ile Ser Asp Thr Ser Ile Val Leu Ser Met Asp Asn Asn Arg
275         280         285
Asp Leu Asp Leu Asp Ser Ile Ile Ala Glu Val Arg Ala Gln Tyr Glu
290         295         300
Glu Ile Ala Leu Lys Ser Lys Ala Glu Ala Glu Thr Leu Tyr Gln Thr
305         310         315         320
Lys Ile Gln Glu Leu Gln Val Thr Ala Gly Gln His Gly Asp Asp Leu
325         330         335
Lys Leu Thr Lys Ala Glu Ile Ser Glu Leu Asn Arg Leu Ile Gln Arg
340         345         350
Ile Arg Ser Glu Ile Gly Asn Val Lys Lys Gln Cys Ala Asp Leu Glu
355         360         365
Thr Ala Ile Ala Asp Ala Glu Gln Arg Gly Asp Cys Ala Leu Lys Asp
370         375         380
Ala Arg Ala Lys Leu Asp Glu Leu Glu Gly Ala Leu His Gln Ala Lys
385         390         395         400
Glu Glu Leu Ala Arg Met Leu Arg Glu Tyr Gln Glu Leu Val Ser Leu
405         410         415
Lys Leu Ala Leu Asp Met Glu Ile Ala Thr Tyr Arg Lys Leu Leu Glu
420         425         430
Ser Glu Glu Cys Arg Met Ser Gly Glu Tyr Pro Asn Ser Val Ser Ile
435         440         445

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Ser Val Ile Ser Ser Thr Asn Ala Gly Ala Gly Gly Ala Gly Phe Ser
 450 455 460
 Met Gly Phe Gly Ala Ser Ser Ser Tyr Ser Tyr Lys Thr Ala Ala Ala
 465 470 475 480
 Asp Val Lys Thr Lys Gly Ser Cys Gly Ser Glu Leu Lys Asp Pro Leu
 485 490 495
 Ala Lys Thr Ser Gly Ser Ser Cys Ala Thr Lys Lys Ala Ser Arg
 500 505 510
 <210> 461
 <211> 540
 <212> PRT
 <213> Homo sapiens

<400> 461
 Met Ser Arg Gln Phe Thr Tyr Lys Ser Gly Ala Ala Ala Lys Gly Gly
 1 5 10 15
 Phe Ser Gly Cys Ser Ala Val Leu Ser Gly Gly Ser Ser Ser Ser Tyr
 20 25 30
 Arg Ala Gly Gly Lys Gly Leu Ser Gly Gly Phe Ser Ser Arg Ser Leu
 35 40 45
 Tyr Ser Leu Gly Gly Ala Arg Ser Ile Ser Phe Asn Val Ala Ser Gly
 50 55 60
 Ser Gly Trp Ala Gly Gly Tyr Gly Phe Gly Arg Gly Arg Ala Ser Gly
 65 70 75 80
 Phe Ala Gly Ser Met Phe Gly Ser Val Ala Leu Gly Ser Val Cys Pro
 85 90 95
 Ser Leu Cys Pro Pro Gly Gly Ile His Gln Val Thr Ile Asn Lys Ser
 100 105 110
 Leu Leu Ala Pro Leu Asn Val Glu Leu Asp Pro Glu Ile Gln Lys Val
 115 120 125
 Arg Ala Gln Glu Arg Glu Gln Ile Lys Val Leu Asn Asn Lys Phe Ala
 130 135 140
 Ser Phe Ile Asp Lys Val Arg Phe Leu Glu Gln Gln Asn Gln Val Leu
 145 150 155 160
 Glu Thr Lys Trp Glu Leu Leu Gln Gln Leu Asp Leu Asn Asn Cys Lys
 165 170 175
 Asn Asn Leu Glu Pro Ile Leu Glu Gly Tyr Ile Ser Asn Leu Arg Lys
 180 185 190
 Gln Leu Glu Thr Leu Ser Gly Asp Arg Val Arg Leu Asp Ser Glu Leu
 195 200 205
 Arg Ser Val Arg Glu Val Val Glu Asp Tyr Lys Lys Arg Tyr Glu Glu
 210 215 220
 Glu Ile Asn Lys Arg Thr Thr Ala Glu Asn Glu Phe Val Val Leu Lys
 225 230 235 240
 Lys Asp Val Asp Ala Ala Tyr Thr Ser Lys Val Glu Leu Gln Ala Lys
 245 250 255
 Val Asp Ala Leu Asp Gly Glu Ile Lys Phe Phe Lys Cys Leu Tyr Glu
 260 265 270
 Gly Glu Thr Ala Gln Ile Gln Ser His Ile Ser Asp Thr Ser Ile Ile
 275 280 285
 Leu Ser Met Asp Asn Asn Arg Asn Leu Asp Leu Asp Ser Ile Ile Ala
 290 295 300
 Glu Val Arg Ala Gln Tyr Glu Glu Ile Ala Arg Lys Ser Lys Ala Glu
 305 310 315 320
 Ala Glu Ala Leu Tyr Gln Thr Lys Phe Gln Glu Leu Gln Leu Ala Ala
 325 330 335
 Gly Arg His Gly Asp Asp Leu Lys His Thr Lys Asn Glu Ile Ser Glu
 340 345 350
 Leu Thr Arg Leu Ile Gln Arg Leu Arg Ser Glu Ile Glu Ser Val Lys
 355 360 365

Lys Gln Cys Ala Asn Leu Glu Thr Ala Ile Ala Asp Ala Glu Gln Arg
 370 375 380
 Gly Asp Cys Ala Leu Lys Asp Ala Arg Ala Lys Leu Asp Glu Leu Glu
 385 390 395 400
 Gly Ala Leu Gln Gln Ala Lys Glu Glu Leu Ala Arg Met Leu Arg Glu
 405 410 415
 Tyr Gln Glu Leu Leu Ser Val Lys Leu Ser Leu Asp Ile Glu Ile Ala
 420 425 430
 Thr Tyr Arg Lys Leu Leu Glu Gly Glu Glu Cys Arg Met Ser Gly Glu
 435 440 445
 Tyr Thr Asn Ser Val Ser Ile Ser Val Ile Asn Ser Ser Met Ala Gly
 450 455 460
 Met Ala Gly Thr Gly Ala Gly Phe Gly Phe Ser Asn Ala Gly Thr Tyr
 465 470 475 480
 Gly Tyr Trp Pro Ser Ser Val Ser Gly Gly Tyr Ser Met Leu Pro Gly
 485 490 495
 Gly Cys Val Thr Gly Ser Gly Asn Cys Ser Pro Arg Gly Glu Ala Arg
 500 505 510
 Thr Arg Leu Gly Ser Ala Ser Glu Phe Arg Asp Ser Gln Gly Lys Thr
 515 520 525
 Leu Ala Leu Ser Ser Pro Thr Lys Lys Thr Met Arg
 530 535 540
 <210> 462
 <211> 645
 <212> PRT
 <213> Homo sapiens

<400> 462
 Met Ser Cys Gln Ile Ser Cys Lys Ser Arg Gly Arg Gly Gly Gly Gly
 1 5 10 15
 Gly Gly Phe Arg Gly Phe Ser Ser Gly Ser Ala Val Val Ser Gly Gly
 20 25 30
 Ser Arg Arg Ser Thr Ser Ser Phe Ser Cys Leu Ser Arg His Gly Gly
 35 40 45
 Gly Gly Gly Gly Phe Gly Gly Gly Gly Phe Gly Ser Arg Ser Leu Val
 50 55 60
 Gly Leu Gly Gly Thr Lys Ser Ile Ser Ile Ser Val Ala Gly Gly Gly
 65 70 75 80
 Gly Gly Phe Gly Ala Gly Gly Phe Gly Gly Arg Gly Gly Gly Phe
 85 90 95
 Gly Gly Gly Ser Gly Phe Gly Gly Gly Ser Gly Phe Gly Gly Gly Ser
 100 105 110
 Gly Phe Ser Gly Gly Gly Phe Gly Gly Gly Gly Phe Gly Gly Gly Arg
 115 120 125
 Phe Gly Gly Phe Gly Gly Pro Gly Gly Val Gly Gly Leu Gly Gly Pro
 130 135 140
 Gly Gly Phe Gly Pro Gly Gly Tyr Pro Gly Gly Ile His Glu Val Ser
 145 150 155 160
 Val Asn Gln Ser Leu Leu Gln Pro Leu Asn Val Lys Val Asp Pro Glu
 165 170 175
 Ile Gln Asn Val Lys Ala Gln Glu Arg Glu Gln Ile Lys Thr Leu Asn
 180 185 190
 Asn Lys Phe Ala Ser Phe Ile Asp Lys Val Arg Phe Leu Glu Gln Gln
 195 200 205
 Asn Gln Val Leu Gln Thr Lys Trp Glu Leu Leu Gln Gln Met Asn Val
 210 215 220
 Gly Thr Arg Pro Ile Asn Leu Glu Pro Ile Phe Gln Gly Tyr Ile Asp
 225 230 235 240
 Ser Leu Lys Arg Tyr Leu Asp Gly Leu Thr Ala Glu Arg Thr Ser Gln
 245 250 255

<400> 463

Met Ser Arg Gln Phe Ser Ser Arg Ser Gly Tyr Arg Ser Gly Gly Gly
1 5 10 15
Phe Ser Ser Gly Ser Ala Gly Ile Ile Asn Tyr Gln Arg Arg Thr Thr
20 25 30

Ser Ser Ser Thr Arg Arg Ser Gly Gly Gly Gly Gly Arg Phe Ser Ser
 35 40 45
 Cys Gly Gly Gly Gly Gly Ser Phe Gly Ala Gly Gly Gly Phe Gly Ser
 50 55 60
 Arg Ser Leu Val Asn Leu Gly Gly Ser Lys Ser Ile Ser Ile Ser Val
 65 70 75 80
 Ala Arg Gly Gly Gly Arg Gly Ser Gly Phe Gly Gly Gly Tyr Gly Gly
 85 90 95
 Gly Gly Phe Gly Gly Gly Gly Phe Gly Gly Gly Gly Phe Gly Gly Gly
 100 105 110
 Gly Ile Gly Gly Gly Gly Phe Gly Gly Phe Gly Ser Gly Gly Gly Gly
 115 120 125
 Phe Gly Gly Gly Gly Phe Gly Gly Gly Gly Tyr Gly Gly Gly Tyr Gly
 130 135 140
 Pro Val Cys Pro Pro Gly Gly Ile Gln Glu Val Thr Ile Asn Gln Ser
 145 150 155 160
 Leu Leu Gln Pro Leu Asn Val Glu Ile Asp Pro Glu Ile Gln Lys Val
 165 170 175
 Lys Ser Arg Glu Arg Glu Gln Ile Lys Ser Leu Asn Asn Gln Phe Ala
 180 185 190
 Ser Phe Ile Asp Lys Val Arg Phe Leu Glu Gln Gln Asn Gln Val Leu
 195 200 205
 Gln Thr Lys Trp Glu Leu Leu Gln Gln Val Asp Thr Ser Thr Arg Thr
 210 215 220
 His Asn Leu Glu Pro Tyr Phe Glu Ser Phe Ile Asn Asn Leu Arg Arg
 225 230 235 240
 Arg Val Asp Gln Leu Lys Ser Asp Gln Ser Arg Leu Asp Ser Glu Leu
 245 250 255
 Lys Asn Met Gln Asp Met Val Glu Asp Tyr Arg Asn Lys Tyr Glu Asp
 260 265 270
 Glu Ile Asn Lys Arg Thr Asn Ala Glu Asn Glu Phe Val Thr Ile Lys
 275 280 285
 Lys Asp Val Asp Gly Ala Tyr Met Thr Lys Val Asp Leu Gln Ala Lys
 290 295 300
 Leu Asp Asn Leu Gln Gln Glu Ile Asp Phe Leu Thr Ala Leu Tyr Gln
 305 310 315 320
 Ala Glu Leu Ser Gln Met Gln Thr Gln Ile Ser Glu Thr Asn Val Ile
 325 330 335
 Leu Ser Met Asp Asn Asn Arg Ser Leu Asp Leu Asp Ser Ile Ile Ala
 340 345 350
 Glu Val Lys Ala Gln Tyr Glu Asp Ile Ala Gln Lys Ser Lys Ala Glu
 355 360 365
 Ala Glu Ser Leu Tyr Gln Ser Lys Tyr Glu Glu Leu Gln Ile Thr Ala
 370 375 380
 Gly Arg His Gly Asp Ser Val Arg Asn Ser Lys Ile Glu Ile Ser Glu
 385 390 395 400
 Leu Asn Arg Val Ile Gln Arg Leu Arg Ser Glu Ile Asp Asn Val Lys
 405 410 415
 Lys Gln Ile Ser Asn Leu Gln Gln Ser Ile Ser Asp Ala Glu Gln Arg
 420 425 430
 Gly Glu Asn Ala Leu Lys Asp Ala Lys Asn Lys Leu Asn Asp Leu Glu
 435 440 445
 Asp Ala Leu Gln Gln Ala Lys Glu Asp Leu Ala Arg Leu Leu Arg Asp
 450 455 460
 Tyr Gln Glu Leu Met Asn Thr Lys Leu Ala Leu Asp Leu Glu Ile Ala
 465 470 475 480
 Thr Tyr Arg Thr Leu Glu Gly Glu Glu Ser Arg Met Ser Gly Glu
 485 490 495
 Cys Ala Pro Asn Val Ser Val Ser Val Ser Thr Ser His Thr Thr Ile
 500 505 510
 Ser Gly Gly Gly Ser Arg Gly Gly Gly Gly Gly Tyr Gly Ser Gly
 515 520 525
 Gly Ser Ser Tyr Gly Ser Gly Gly Gly Ser Tyr Gly Ser Gly Gly Gly
 530 535 540
 Gly Gly Gly Gly Arg Gly Ser Tyr Gly Ser Gly Gly Ser Ser Tyr Gly
 545 550 555 560

<213> Homo sapiens

Met	Ser	Arg	Gln	Ala	Ser	Lys	Thr	Ser	Gly	Gly	Gly	Ser	Gln	Gly	Phe
1				5					10					15	
Ser	Gly	Arg	Ser	Ala	Val	Val	Ser	Gly	Ser	Ser	Arg	Met	Ser	Cys	Val
			20					25					30		
Ala	His	Ser	Gly	Gly	Ala	Gly	Gly	Gly	Ala	Tyr	Gly	Phe	Arg	Ser	Gly
		35					40					45			
Ala	Gly	Gly	Phe	Gly	Ser	Arg	Ser	Leu	Tyr	Asn	Leu	Gly	Gly	Asn	Lys
		50				55					60				
Ser	Ile	Ser	Ile	Ser	Val	Ala	Ala	Gly	Gly	Ser	Arg	Ala	Gly	Gly	Phe
65					70					75					80
Gly	Gly	Gly	Arg	Ser	Ser	Cys	Ala	Phe	Ala	Gly	Gly	Tyr	Gly	Gly	Gly
			85					90						95	
Phe	Gly	Ser	Gly	Tyr	Gly	Gly	Gly	Phe	Gly	Gly	Gly	Phe	Gly	Gly	Gly
			100					105					110		
Arg	Gly	Met	Gly	Gly	Gly	Phe	Gly	Gly	Ala	Gly	Gly	Phe	Gly	Gly	Ala
		115					120					125			
Gly	Gly	Phe	Gly	Gly	Ala	Gly	Gly	Phe	Gly	Gly	Pro	Gly	Gly	Phe	Gly
		130				135					140				
Gly	Ser	Gly	Gly	Phe	Gly	Gly	Pro	Gly	Ser	Leu	Gly	Ser	Pro	Gly	Gly
145				150						155					160
Phe	Ala	Pro	Gly	Gly	Phe	Pro	Gly	Gly	Ile	Gln	Glu	Val	Thr	Thr	Asn
			165					170						175	
Gln	Ser	Leu	Leu	Gln	Pro	Leu	Lys	Val	Glu	Thr	Asp	Pro	Gln	Ile	Gly
			180					185					190		
Gln	Val	Lys	Ala	Gln	Glu	Arg	Glu	Gln	Ile	Lys	Thr	Leu	Asn	Asn	Lys
		195					200					205			
Phe	Ala	Ser	Phe	Ile	Asp	Lys	Val	Arg	Phe	Leu	Glu	Gln	Gln	Asn	Lys
		210				215					220				
Val	Leu	Glu	Thr	Lys	Trp	Asn	Leu	Leu	Gln	Gln	Gln	Gly	Thr	Ser	Ser
225				230					235						240
Ile	Ser	Gly	Thr	Asn	Asn	Leu	Glu	Pro	Leu	Phe	Glu	Asn	His	Ile	Asn
				245					250					255	
Tyr	Leu	Arg	Ser	Tyr	Leu	Asp	Asn	Ile	Leu	Gly	Glu	Arg	Gly	Arg	Leu
			260					265					270		
Asp	Ser	Glu	Leu	Lys	Asn	Met	Glu	Asp	Leu	Val	Glu	Asp	Phe	Lys	Lys
		275					280					285			
Lys	Tyr	Glu	Asp	Glu	Ile	Asn	Lys	Arg	Thr	Ala	Ala	Glu	Asn	Glu	Phe
		290				295					300				
Val	Thr	Leu	Lys	Lys	Asp	Val	Asp	Ser	Ala	Tyr	Met	Asn	Lys	Val	Glu
305				310						315					320
Leu	Gln	Ala	Lys	Val	Asp	Ala	Leu	Ile	Asp	Glu	Ile	Asp	Phe	Leu	Arg
				325					330					335	

Thr Leu Tyr Asp Ala Glu Leu Ser Gln Met Gln Ser His Ile Ser Asp
 340 345 350
 Thr Ser Val Val Leu Ser Met Asp Asn Asn Arg Ser Leu Asp Leu Asp
 355 360 365
 Ser Ile Ile Ala Glu Val Gly Ala Gln Tyr Glu Asp Ile Ala Gln Arg
 370 375 380
 Ser Lys Ala Glu Ala Glu Ala Leu Tyr Gln Thr Lys Leu Gly Glu Leu
 385 390 395 400
 Gln Thr Thr Ala Gly Arg His Gly Asp Asp Leu Arg Asn Thr Lys Ser
 405 410 415
 Glu Ile Ile Glu Leu Asn Arg Met Ile Gln Arg Leu Arg Ala Glu Ile
 420 425 430
 Glu Gly Val Lys Lys Gln Asn Ala Leu Gln Thr Ala Ile Ala Gln
 435 440 445
 Ala Glu Gln His Gly Glu Met Ala Leu Lys Asp Ala Asn Ala Lys Leu
 450 455 460
 Gln Glu Leu Gln Ala Ala Leu Gln Gln Ala Lys Asp Asp Leu Ala Arg
 465 470 475 480
 Leu Leu Arg Asp Tyr Gln Glu Leu Met Asn Val Lys Leu Ala Leu Asp
 485 490 495
 Val Glu Ile Ala Thr Tyr Arg Lys Leu Leu Glu Gly Glu Glu Tyr Ser
 500 505 510
 Arg Met Ser Gly Glu Cys Pro Ser Ala Val Ser Ile Ser Val Val Ser
 515 520 525
 Ser Ser Thr Thr Ser Ala Ser Ala Gly Gly Tyr Gly Gly Gly Tyr Gly
 530 535 540
 Gly Gly Met Gly Gly Gly Leu Gly Gly Gly Phe Ser Ala Gly Gly Gly
 545 550 555 560
 Ser Gly Ile Gly Phe Gly Arg Gly Gly Gly Gly Gly Ile Gly Gly Gly
 565 570 575
 Phe Gly Gly Gly Thr Ser Gly Phe Ser Gly Gly Ser Gly Phe Gly Ser
 580 585 590
 Ile Ser Gly Ala Arg Tyr Gly Val Ser Gly Gly Gly Phe Ser Ser Ala
 595 600 605
 Ser Asn Arg Gly Gly Ser Ile Lys Phe Ser Gln Ser Ser Gln Ser Ser
 610 615 620
 Gln Arg Tyr Ser Arg
 625
 <210> 465
 <211> 534
 <212> PRT
 <213> Homo sapiens

<400> 465
 Met Ile Ala Arg Gln Gln Cys Val Arg Gly Gly Pro Arg Gly Phe Ser
 1 5 10 15
 Cys Gly Ser Ala Ile Val Gly Gly Gly Lys Arg Gly Ala Phe Ser Ser
 20 25 30
 Val Ser Met Ser Gly Gly Ala Gly Arg Cys Ser Ser Gly Gly Phe Gly
 35 40 45
 Ser Arg Ser Leu Tyr Asn Leu Arg Gly Asn Lys Ser Ile Ser Met Ser
 50 55 60
 Val Ala Gly Ser Arg Gln Gly Ala Cys Phe Gly Gly Ala Gly Gly Phe
 65 70 75 80
 Gly Thr Gly Gly Phe Gly Ala Gly Gly Phe Gly Ala Gly Phe Gly Thr
 85 90 95
 Gly Gly Phe Gly Gly Gly Phe Gly Gly Ser Phe Ser Gly Lys Gly Gly
 100 105 110
 Pro Gly Phe Pro Val Cys Pro Ala Gly Gly Ile Gln Glu Val Thr Ile
 115 120 125

Asn Gln Ser Leu Leu Thr Pro Leu His Val Glu Ile Asp Pro Glu Ile
 130 135 140
 Gln Lys Val Arg Thr Glu Glu Arg Glu Gln Ile Lys Leu Leu Asn Asn
 145 150 155 160
 Lys Phe Ala Ser Phe Ile Asp Lys Val Gln Phe Leu Glu Gln Gln Asn
 165 170 175
 Lys Val Leu Glu Thr Lys Trp Asn Leu Leu Gln Gln Gln Thr Thr Thr
 180 185 190
 Thr Ser Ser Lys Asn Leu Glu Pro Leu Phe Glu Thr Tyr Leu Ser Val
 195 200 205
 Leu Arg Lys Gln Leu Asp Thr Leu Gly Asn Asp Lys Gly Arg Leu Gln
 210 215 220
 Ser Glu Leu Lys Thr Met Gln Asp Ser Val Glu Asp Phe Lys Thr Lys
 225 230 235 240
 Tyr Glu Glu Glu Ile Asn Lys Arg Thr Ala Ala Glu Asn Asp Phe Val
 245 250 255
 Val Leu Lys Lys Asp Val Asp Ala Ala Tyr Leu Asn Lys Val Glu Leu
 260 265 270
 Glu Ala Lys Val Asp Ser Leu Asn Asp Glu Ile Asn Phe Leu Lys Val
 275 280 285
 Leu Tyr Asp Ala Glu Leu Ser Gln Met Gln Thr His Val Ser Asp Thr
 290 295 300
 Ser Val Val Leu Ser Met Asp Asn Asn Arg Asn Leu Asp Leu Asp Ser
 305 310 315 320
 Ile Ile Ala Glu Val Arg Ala Gln Tyr Glu Glu Ile Ala Gln Arg Ser
 325 330 335
 Lys Ala Glu Ala Glu Ala Leu Tyr Gln Thr Lys Val Gln Gln Leu Gln
 340 345 350
 Ile Ser Val Asp Gln His Gly Asp Asn Leu Lys Asn Thr Lys Ser Glu
 355 360 365
 Ile Ala Glu Leu Asn Arg Met Ile Gln Arg Leu Arg Ala Glu Ile Glu
 370 375 380
 Asn Ile Lys Lys Gln Cys Gln Thr Leu Gln Val Ser Val Ala Asp Ala
 385 390 395 400
 Glu Gln Arg Gly Glu Asn Ala Leu Lys Asp Ala His Ser Lys Arg Val
 405 410 415
 Glu Leu Glu Ala Ala Leu Gln Gln Ala Lys Glu Glu Leu Ala Arg Met
 420 425 430
 Leu Arg Glu Tyr Gln Glu Leu Met Ser Val Lys Leu Ala Leu Asp Ile
 435 440 445
 Glu Ile Ala Thr Tyr Arg Lys Leu Leu Glu Gly Glu Glu Tyr Arg Met
 450 455 460
 Ser Gly Glu Cys Gln Ser Ala Val Ser Ile Ser Val Val Ser Gly Ser
 465 470 475 480
 Thr Ser Thr Gly Gly Ile Ser Gly Gly Leu Gly Ser Gly Ser Gly Phe
 485 490 495
 Gly Leu Ser Ser Gly Phe Gly Ser Gly Ser Gly Ser Gly Phe Phe
 500 505 510
 Gly Gly Ser Val Ser Gly Ser Ser Ser Lys Ile Ile Ser Thr Thr
 515 520 525
 Thr Leu Asn Lys Arg Arg
 530
 <210> 466
 <211> 483
 <212> PRT
 <213> Homo sapiens
 <400> 466
 Met Ser Ile Arg Val Thr Gln Lys Ser Tyr Lys Val Ser Thr Ser Gly
 1 5 10 15

Pro Arg Ala Phe Ser Ser Arg Ser Tyr Thr Ser Gly Pro Gly Ser Arg
 20 25 30
 Ile Ser Ser Ser Ser Phe Ser Arg Val Gly Ser Ser Asn Phe Arg Gly
 35 40 45
 Gly Leu Gly Gly Gly Tyr Gly Gly Ala Ser Gly Met Gly Gly Ile Thr
 50 55 60
 Ala Val Thr Val Asn Gln Ser Leu Leu Ser Pro Leu Val Leu Glu Val
 65 70 75 80
 Asp Pro Asn Ile Gln Ala Val Arg Thr Gln Glu Lys Glu Gln Ile Lys
 85 90 95
 Thr Leu Asn Asn Lys Phe Ala Ser Phe Ile Asp Lys Val Arg Phe Leu
 100 105 110
 Glu Gln Gln Asn Lys Met Leu Glu Thr Lys Trp Ser Leu Leu Gln Gln
 115 120 125
 Gln Lys Thr Ala Arg Ser Asn Met Asp Asn Met Phe Glu Ser Tyr Ile
 130 135 140
 Asn Asn Leu Arg Arg Gln Leu Glu Thr Leu Gly Gln Glu Lys Leu Lys
 145 150 155 160
 Leu Glu Ala Glu Leu Gly Asn Met Gln Gly Leu Val Glu Asp Phe Lys
 165 170 175
 Asn Lys Tyr Glu Asp Glu Ile Asn Lys Arg Thr Glu Met Glu Asn Glu
 180 185 190
 Phe Val Leu Ile Lys Lys Asp Val Asp Glu Ala Tyr Met Asn Lys Val
 195 200 205
 Glu Leu Glu Ser Arg Leu Glu Gly Leu Thr Asp Glu Ile Asn Phe Leu
 210 215 220
 Arg Gln Leu Tyr Glu Glu Glu Ile Arg Glu Leu Gln Ser Gln Ile Ser
 225 230 235 240
 Asp Thr Ser Val Val Leu Ser Met Asp Asn Ser Arg Ser Leu Asp Met
 245 250 255
 Asp Ser Ile Ile Ala Glu Val Lys Ala Gln Tyr Glu Asp Ile Ala Asn
 260 265 270
 Arg Ser Arg Ala Glu Ala Glu Ser Met Tyr Gln Ile Lys Tyr Glu Glu
 275 280 285
 Leu Gln Ser Leu Ala Gly Lys His Gly Asp Asp Leu Arg Arg Thr Lys
 290 295 300
 Thr Glu Ile Ser Glu Met Asn Arg Asn Ile Ser Arg Leu Gln Ala Glu
 305 310 315 320
 Ile Glu Gly Leu Lys Gly Gln Arg Ala Ser Leu Glu Ala Ala Ile Ala
 325 330 335
 Asp Ala Glu Gln Arg Gly Glu Leu Ala Ile Lys Asp Ala Asn Ala Lys
 340 345 350
 Leu Ser Glu Leu Glu Ala Ala Leu Gln Arg Ala Lys Gln Asp Met Ala
 355 360 365
 Arg Gln Leu Arg Glu Tyr Gln Glu Leu Met Asn Val Lys Leu Ala Leu
 370 375 380
 Asp Ile Glu Ile Ala Thr Tyr Arg Lys Leu Leu Glu Gly Glu Glu Ser
 385 390 395 400
 Arg Leu Glu Ser Gly Met Gln Asn Met Ser Ile His Thr Lys Thr Thr
 405 410 415
 Ser Gly Tyr Ala Gly Gly Leu Ser Ser Ala Tyr Gly Gly Leu Thr Ser
 420 425 430
 Pro Gly Leu Ser Tyr Ser Leu Gly Ser Ser Phe Gly Ser Gly Ala Gly
 435 440 445
 Ser Ser Ser Phe Ser Arg Thr Ser Ser Ser Arg Ala Val Val Val Lys
 450 455 460
 Lys Ile Glu Thr Arg Asp Gly Lys Leu Val Ser Glu Ser Ser Asp Val
 465 470 475 480
 Leu Pro Lys

<210> 467

<211> 430

<212> PRT

<213> Homo sapiens

<400> 467

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Met Ser Phe Thr Thr Arg Ser Thr Phe Ser Thr Asn Tyr Arg Ser Leu
1      5      10      15
Gly Ser Val Gln Ala Pro Ser Tyr Gly Ala Arg Pro Val Ser Ser Ala
20      25      30
Ala Ser Val Tyr Ala Gly Ala Gly Gly Ser Gly Ser Arg Ile Ser Val
35      40      45
Ser Arg Ser Thr Ser Phe Arg Gly Gly Met Gly Ser Gly Gly Leu Ala
50      55      60
Thr Gly Ile Ala Gly Gly Leu Ala Gly Met Gly Gly Ile Gln Asn Glu
65      70      75      80
Lys Glu Thr Met Gln Ser Leu Asn Asp Arg Leu Ala Ser Tyr Leu Asp
85      90      95
Arg Val Arg Ser Leu Glu Thr Glu Asn Arg Arg Leu Glu Ser Lys Ile
100     105     110
Arg Glu His Leu Glu Lys Lys Gly Pro Gln Val Arg Asp Trp Ser His
115     120     125
Tyr Phe Lys Ile Ile Glu Asp Leu Arg Ala Gln Ile Phe Ala Asn Thr
130     135     140
Val Asp Asn Ala Arg Ile Val Leu Gln Ile Asp Asn Ala Arg Leu Ala
145     150     155     160
Ala Asp Asp Phe Arg Val Lys Tyr Glu Thr Glu Leu Ala Met Arg Gln
165     170     175
Ser Val Glu Asn Asp Ile His Gly Leu Arg Lys Val Ile Asp Asp Thr
180     185     190
Asn Ile Thr Arg Leu Gln Leu Glu Thr Glu Ile Glu Ala Leu Lys Glu
195     200     205
Glu Leu Leu Phe Met Lys Lys Asn His Glu Glu Glu Val Lys Gly Leu
210     215     220
Gln Ala Gln Ile Ala Ser Ser Gly Leu Thr Val Glu Val Asp Ala Pro
225     230     235     240
Lys Ser Gln Asp Leu Ala Lys Ile Met Ala Asp Ile Arg Ala Gln Tyr
245     250     255
Asp Glu Leu Ala Arg Lys Asn Arg Glu Leu Asp Lys Tyr Trp Ser
260     265     270
Gln Gln Ile Glu Glu Ser Thr Thr Val Val Thr Thr Gln Ser Ala Glu
275     280     285
Val Gly Ala Ala Glu Thr Thr Leu Thr Glu Leu Arg Arg Thr Val Gln
290     295     300
Ser Leu Glu Ile Asp Leu Asp Ser Met Arg Asn Leu Lys Ala Ser Leu
305     310     315     320
Glu Asn Ser Leu Arg Glu Val Glu Ala Arg Tyr Ala Leu Gln Met Glu
325     330     335
Gln Leu Asn Gly Ile Leu Leu His Leu Glu Ser Glu Leu Ala Gln Thr
340     345     350
Arg Ala Glu Gly Gln Arg Gln Ala Gln Glu Tyr Glu Ala Leu Leu Asn
355     360     365
Ile Lys Val Lys Leu Glu Ala Glu Ile Ala Thr Tyr Arg Arg Leu Leu
370     375     380
Glu Asp Gly Glu Asp Phe Asn Leu Gly Asp Ala Leu Asp Ser Ser Asn
385     390     395     400
Ser Met Gln Thr Ile Gln Lys Thr Thr Thr Arg Arg Ile Val Asp Gly
405     410     415
Lys Val Val Ser Glu Thr Asn Asp Thr Lys Val Leu Arg His
420     425     430

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<210> 468

<211> 392

<212> PRT

<213> Homo sapiens

<400> 468
 Met Val Ala Arg Val Gly Leu Leu Leu Arg Ala Leu Gln Leu Leu Leu
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 Trp Gly His Leu Asp Ala Gln Pro Ala Glu Arg Gly Gly Gln Glu Leu
 20 25 30
 Arg Lys Glu Ala Glu Ala Phe Leu Glu Lys Tyr Gly Tyr Leu Asn Glu
 35 40 45
 Gln Val Pro Lys Ala Pro Thr Ser Thr Arg Phe Ser Asp Ala Ile Arg
 50 55 60
 Ala Phe Gln Trp Val Ser Gln Leu Pro Val Ser Gly Val Leu Asp Arg
 65 70 75 80
 Ala Thr Leu Arg Gln Met Thr Arg Pro Arg Cys Gly Val Thr Asp Thr
 85 90 95
 Asn Ser Tyr Ala Ala Trp Ala Glu Arg Ile Ser Asp Leu Phe Ala Arg
 100 105 110
 His Arg Thr Lys Met Arg Arg Lys Lys Arg Phe Ala Lys Gln Gly Asn
 115 120 125
 Lys Trp Tyr Lys Gln His Leu Ser Tyr Arg Leu Val Asn Trp Pro Glu
 130 135 140
 His Leu Pro Glu Pro Ala Val Arg Gly Ala Val Arg Ala Ala Phe Gln
 145 150 155 160
 Leu Trp Ser Asn Val Ser Ala Leu Glu Phe Trp Glu Ala Pro Ala Thr
 165 170 175
 Gly Pro Ala Asp Ile Arg Leu Thr Phe Phe Gln Gly Asp His Asn Asp
 180 185 190
 Gly Leu Gly Asn Ala Phe Asp Gly Pro Gly Gly Ala Leu Ala His Ala
 195 200 205
 Phe Leu Pro Arg Arg Gly Glu Ala His Phe Asp Gln Asp Glu Arg Trp
 210 215 220
 Ser Leu Ser Arg Arg Arg Gly Arg Asn Leu Phe Val Val Leu Ala His
 225 230 235 240
 Glu Ile Gly His Thr Leu Gly Leu Thr His Ser Pro Ala Pro Arg Ala
 245 250 255
 Leu Met Ala Pro Tyr Tyr Lys Arg Leu Gly Arg Asp Ala Leu Leu Ser
 260 265 270
 Trp Asp Asp Val Leu Ala Val Gln Ser Leu Tyr Gly Lys Pro Leu Gly
 275 280 285
 Gly Ser Val Ala Val Gln Leu Pro Gly Lys Leu Phe Thr Asp Phe Glu
 290 295 300
 Thr Trp Asp Ser Tyr Ser Pro Gln Gly Arg Arg Pro Glu Thr Gln Gly
 305 310 315 320
 Pro Lys Tyr Cys His Ser Ser Phe Asp Ala Ile Thr Val Asp Arg Gln
 325 330 335
 Gln Gln Leu Tyr Ile Phe Lys Gly Ser His Phe Trp Glu Val Ala Ala
 340 345 350
 Asp Gly Asn Val Ser Glu Pro Arg Pro Leu Gln Glu Arg Trp Val Gly
 355 360 365
 Leu Pro Pro Asn Ile Glu Ala Ala Val Ser Leu Asn Asp Gly Asp
 370 375 380
 Phe Tyr Phe Phe Lys Val Gln Ser
 385 390

<210> 469

<211> 851

<212> PRT

<213> Homo sapiens

<400> 469

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Met Ala Gln Trp Glu Met Leu Gln Asn Leu Asp Ser Pro Phe Gln Asp
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Gln Leu His Gln Leu Tyr Ser His Ser Leu Leu Pro Val Asp Ile Arg
20      25      30
Gln Tyr Leu Ala Val Trp Ile Glu Asp Gln Asn Trp Gln Glu Ala Ala
35      40      45
Leu Gly Ser Asp Asp Ser Lys Ala Thr Met Leu Phe Phe His Phe Leu
50      55      60
Asp Gln Leu Asn Tyr Glu Cys Gly Arg Cys Ser Gln Asp Pro Glu Ser
65      70      75      80
Leu Leu Leu Gln His Asn Leu Arg Lys Phe Cys Arg Asp Ile Gln Pro
85      90      95
Phe Ser Gln Asp Pro Thr Gln Leu Ala Glu Met Ile Phe Asn Leu Leu
100     105     110
Leu Glu Glu Lys Arg Ile Leu Ile Gln Ala Gln Arg Ala Gln Leu Glu
115     120     125
Gln Gly Glu Pro Val Leu Glu Thr Pro Val Glu Ser Gln Gln His Glu
130     135     140
Ile Glu Ser Arg Ile Leu Asp Leu Arg Ala Met Met Glu Lys Leu Val
145     150     155     160
Lys Ser Ile Ser Gln Leu Lys Asp Gln Gln Asp Val Phe Cys Phe Arg
165     170     175
Tyr Lys Ile Gln Ala Lys Gly Lys Thr Pro Ser Leu Asp Pro His Gln
180     185     190
Thr Lys Glu Gln Lys Ile Leu Gln Glu Thr Leu Asn Glu Leu Asp Lys
195     200     205
Arg Arg Lys Glu Val Leu Asp Ala Ser Lys Ala Leu Leu Gly Arg Leu
210     215     220
Thr Thr Leu Ile Glu Leu Leu Leu Pro Lys Leu Glu Glu Trp Lys Ala
225     230     235     240
Gln Gln Gln Lys Ala Cys Ile Arg Ala Pro Ile Asp His Gly Leu Glu
245     250     255
Gln Leu Glu Thr Trp Phe Thr Ala Gly Ala Lys Leu Leu Phe His Leu
260     265     270
Arg Gln Leu Leu Lys Glu Leu Lys Gly Leu Ser Cys Leu Val Ser Tyr
275     280     285
Gln Asp Asp Pro Leu Thr Lys Gly Val Asp Leu Arg Asn Ala Gln Val
290     295     300
Thr Glu Leu Leu Gln Arg Leu Leu His Arg Ala Phe Val Val Glu Thr
305     310     315     320
Gln Pro Cys Met Pro Gln Thr Pro His Arg Pro Leu Ile Leu Lys Thr
325     330     335
Gly Ser Lys Phe Thr Val Arg Thr Arg Leu Leu Val Arg Leu Gln Glu
340     345     350
Gly Asn Glu Ser Leu Thr Val Glu Val Ser Ile Asp Arg Asn Pro Pro
355     360     365
Gln Leu Gln Gly Phe Arg Lys Phe Asn Ile Leu Thr Ser Asn Gln Lys
370     375     380
Thr Leu Thr Pro Glu Lys Gly Gln Ser Gln Gly Leu Ile Trp Asp Phe
385     390     395     400
Gly Tyr Leu Thr Leu Val Glu Gln Arg Ser Gly Gly Ser Gly Lys Gly
405     410     415
Ser Asn Lys Gly Pro Leu Gly Val Thr Glu Glu Leu His Ile Ile Ser
420     425     430
Phe Thr Val Lys Tyr Thr Tyr Gln Gly Leu Lys Gln Glu Leu Lys Thr
435     440     445
Asp Thr Leu Pro Val Val Ile Ser Asn Met Asn Gln Leu Ser Ile
450     455     460
Ala Trp Ala Ser Val Leu Trp Phe Asn Leu Leu Ser Pro Asn Leu Gln
465     470     475     480
Asn Gln Gln Phe Phe Ser Asn Pro Pro Lys Ala Pro Trp Ser Leu Leu
485     490     495
Gly Pro Ala Leu Ser Trp Gln Phe Ser Ser Tyr Val Gly Arg Gly Leu
500     505     510

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Asn Ser Asp Gln Leu Ser Met Leu Arg Asn Lys Leu Phe Gly Gln Asn
 515 520 525
 Cys Arg Thr Glu Asp Pro Leu Leu Ser Trp Ala Asp Phe Thr Lys Arg
 530 535 540
 Glu Ser Pro Pro Gly Lys Leu Pro Phe Trp Thr Trp Leu Asp Lys Ile
 545 550 555 560
 Leu Glu Leu Val His Asp His Leu Lys Asp Leu Trp Asn Asp Gly Arg
 565 570 575
 Ile Met Gly Phe Val Ser Arg Ser Gln Glu Arg Arg Leu Leu Lys Lys
 580 585 590
 Thr Met Ser Gly Thr Phe Leu Leu Arg Phe Ser Glu Ser Ser Glu Gly
 595 600 605
 Gly Ile Thr Cys Ser Trp Val Glu His Gln Asp Asp Asp Lys Val Leu
 610 615 620
 Ile Tyr Ser Val Gln Pro Tyr Thr Lys Glu Val Leu Gln Ser Leu Pro
 625 630 635 640
 Leu Thr Glu Ile Ile Arg His Tyr Gln Leu Leu Thr Glu Glu Asn Ile
 645 650 655
 Pro Glu Asn Pro Leu Arg Phe Leu Tyr Pro Arg Ile Pro Arg Asp Glu
 660 665 670
 Ala Phe Gly Cys Tyr Tyr Gln Glu Lys Val Asn Leu Gln Glu Arg Arg
 675 680 685
 Lys Tyr Leu Lys His Arg Leu Ile Val Val Ser Asn Arg Gln Val Asp
 690 695 700
 Glu Leu Gln Gln Pro Leu Glu Leu Lys Pro Glu Pro Glu Leu Glu Ser
 705 710 715 720
 Leu Glu Leu Glu Leu Gly Leu Val Pro Glu Pro Glu Leu Ser Leu Asp
 725 730 735
 Leu Glu Pro Leu Leu Lys Ala Gly Leu Asp Leu Gly Pro Glu Leu Glu
 740 745 750
 Ser Val Leu Glu Ser Thr Leu Glu Pro Val Ile Glu Pro Thr Leu Cys
 755 760 765
 Met Val Ser Gln Thr Val Pro Glu Pro Asp Gln Gly Pro Val Ser Gln
 770 775 780
 Pro Val Pro Glu Pro Asp Leu Pro Cys Asp Leu Arg His Leu Asn Thr
 785 790 795 800
 Glu Pro Met Glu Ile Phe Arg Asn Cys Val Lys Ile Glu Glu Ile Met
 805 810 815
 Pro Asn Gly Asp Pro Leu Leu Ala Gly Gln Asn Thr Val Asp Glu Val
 820 825 830
 Tyr Val Ser Arg Pro Ser His Phe Tyr Thr Asp Gly Pro Leu Met Pro
 835 840 845
 Ser Asp Phe
 850

<210> 470

<211> 335

<212> PRT

<213> Homo sapiens

<400> 470

Met Gly Lys Val Lys Val Gly Val Asn Gly Phe Gly Arg Ile Gly Arg
 1 5 10 15
 Leu Val Thr Arg Ala Ala Phe Asn Ser Gly Lys Val Asp Ile Val Ala
 20 25 30
 Ile Asn Asp Pro Phe Ile Asp Leu Asn Tyr Met Val Tyr Met Phe Gln
 35 40 45
 Tyr Asp Ser Thr His Gly Lys Phe His Gly Thr Val Lys Ala Glu Asn
 50 55 60
 Gly Lys Leu Val Ile Asn Gly Asn Pro Ile Thr Ile Phe Gln Glu Arg
 65 70 75 80

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Asp Pro Ser Lys Ile Lys Trp Gly Asp Ala Gly Ala Glu Tyr Val Val
 85 90 95
 Glu Ser Thr Gly Val Phe Thr Thr Met Glu Lys Ala Gly Ala His Leu
 100 105 110
 Gln Gly Gly Ala Lys Arg Val Ile Ile Ser Ala Pro Ser Ala Asp Ala
 115 120 125
 Pro Met Phe Val Met Gly Val Asn His Glu Lys Tyr Asp Asn Ser Leu
 130 135 140
 Lys Ile Ile Ser Asn Ala Ser Cys Thr Thr Asn Cys Leu Ala Pro Leu
 145 150 155 160
 Ala Lys Val Ile His Asp Asn Phe Gly Ile Val Glu Gly Leu Met Thr
 165 170 175
 Thr Val His Ala Ile Thr Ala Thr Gln Lys Thr Val Asp Gly Pro Ser
 180 185 190
 Gly Lys Leu Trp Arg Asp Gly Arg Gly Ala Leu Gln Asn Ile Ile Pro
 195 200 205
 Ala Ser Thr Gly Ala Ala Lys Ala Val Gly Lys Val Ile Pro Glu Leu
 210 215 220
 Asn Gly Lys Leu Thr Gly Met Ala Phe Arg Val Pro Thr Ala Asn Val
 225 230 235 240
 Ser Val Val Asp Leu Thr Cys Arg Leu Glu Lys Pro Ala Lys Tyr Asp
 245 250 255
 Asp Ile Lys Lys Val Val Lys Gln Ala Ser Glu Gly Pro Leu Lys Gly
 260 265 270
 Ile Leu Gly Tyr Thr Glu His Gln Val Val Ser Ser Asp Phe Asn Ser
 275 280 285
 Asp Thr His Ser Ser Thr Phe Asp Ala Gly Ala Gly Ile Ala Leu Asn
 290 295 300
 Asp His Phe Val Lys Leu Ile Ser Trp Tyr Asp Asn Glu Phe Gly Tyr
 305 310 315 320
 Ser Asn Arg Val Val Asp Leu Met Ala His Met Ala Ser Lys Glu
 325 330 335

<210> 471

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> NAP4 Probe

<400> 471

tccgcctcag tcgcctcttt cg

<210> 472

22

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> NAP4 FOR PRIMER

<400> 472

tcggaagggc tccttcaaa

<210> 473

19

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> NAP4 REV PRIMER

<400> 473

caccgttgca gctcttggt

19

<210> 474

<211> 34

<212> DNA

<213> Artificial Sequence

<220>

<223> MRLP45 Probe

<400> 474

ctccattcc cctcatgcta taaaaagaac tacc

34

<210> 475

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> MRLP45 FOR PRIMER

<400> 475

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<210> 476

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> MRLP45 REV PRIMER

<400> 476

tgagcaggat gggagagaac a

21

<210> 477

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> TCF2 Probe

<400> 477

caaaagctgg ccatggacgc ct

22

<210> 478

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> TCF2 FOR PRIMER

<400> 478

gcaggaagga ggaggcattc

20

<210> 479

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> TCF2 REV PRIMER

<400> 479

caggctgtga gtctggttgg a

21

<210> 480

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> ROK1 Probe

<400> 480

cagctggcctt ccattttcct ggcct

25

<210> 481

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> ROK1 FOR PRIMER

<400> 481

tggcaaaact gggttcagag a

21

<210> 482

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> ROK1 REV PRIMER

<400> 482

tcggaccttg tgggatgtg

<210> 483

19

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> KRT1 Probe

<400> 483

ccgccgccta atatgcaaca ttaggg

<210> 484

26

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> KRT1 FOR PRIMER

<400> 484

cgagtattcc aaagctggta tcg

<210> 485

23

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> KRT1 REV PRIMER

<400> 485

atcacagaga gatggccctt atct

<210> 486

24

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> KRT5 Probe

<400> 486

ccgccgccta atatgcaaca ttaggg

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<210> 487

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> KRT5 FOR PRIMER

<400> 487

cgagtattcc aaagctggta tcg

23

<210> 488

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> KRT5 REV PRIMER

<400> 488

atcacagaga gatggccctt atct

24

<210> 489

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> KRT8 Probe

<400> 489

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<210> 490

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> KRT8 FOR PRIMER

<400> 490
cgagtattcc aaagctggta tcg 23
<210> 491

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> KRT8 REV PRIMER

<400> 491
atcacagaga gatggccctt atct 24
<210> 492

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> KRT9 Probe

<400> 492
ccgccgccta atatgcaaca ttaggg 26
<210> 493

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> KRT9 FOR PRIMER

<400> 493
cgagtattcc aaagctggta tcg 23
<210> 494

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> KRT9 REV PRIMER

<400> 494
atcacagaga gatggccctt atct 24
<210> 495

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> KRT10-2 Probe

<400> 495

ccgccgccta atatgcaaca ttaggg

<210> 496

26

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> KRT10-2 FOR PRIMER

<400> 496

cgagtattcc aaagctggta tcg

<210> 497

23

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> KRT10-2 REV PRIMER

<400> 497

atcacagaga gatggccctt atct

<210> 498

24

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> KRT14 Probe

<400> 498

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<210> 499

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<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> KRT14 FOR PRIMER

<400> 499

cgagtattcc aaagctggta tcg

23

<210> 500

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> KRT14 REV PRIMER

<400> 500

atcacagaga gatggccctt atct

24

<210> 501

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> KRT18 Probe

<400> 501

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<210> 502

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> KRT18 FOR PRIMER

<400> 502

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23

<210> 503

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> KRT18 REV PRIMER

<400> 503

atcacagaga gatggccctt atct

24

<210> 504

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